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THE UNIVERSITY OF ALBERTA

PERCEIVED PROFESSIONAL DEVELOPMENT NEEDS OF DIPLOMA NURSE EDUCATORS

by

YVONNE VICTORIA MORRIS SCARLETT

©

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

IN

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "Perceived Professional Development Needs of Diploma Nurse Educators," submitted by Yvonne Victoria Morris Scarlett in partial fulfillment of the requirements for the degree of Master of Education in Adult and Higher Education.

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Abstract

The major purpose of the study was to determine the nature and extent of the perceived professional development needs of diploma nurse educators in Alberta. More specifically, the study focused on the perception of needs relative to seven specified knowledge/skill areas: the school of nursing, adult learner, classroom instruction, teaching strategies, clinical and theoretical evaluation, the school's curriculum, and interpersonal interactions.

A questionnaire was developed and used to collect data based on the needs assessment conceptual framework and from information gleaned from review of the literature for the study. A total of 169 out of 189 respondents (89%) responded to the survey.

The majority of respondents indicated that they were currently performing at a moderate to high level on all knowledge and skill areas examined; however, their preference would be to achieve a high to very high level of performance in all seven knowledge and skill areas. The areas of greatest perceived need for professional development were related to classroom instruction, teaching strategies, and interpersonal relationships with students and peers.

Results indicated that the higher educational requirements for beginning nurses entering the nursing profession by the year 2000 were influencing nurse educators to pursue graduate education.

The findings of the study should be important to individuals planning professional development programs for diploma nurse educators. Special attention should be paid to areas addressing classroom instruction, teaching strategies, and interpersonal relationships.

The recommendations proposed by the researcher included making adequate time and financial assistance available for diploma nurse educators to pursue professional development activities to meet their needs. Professional development programs for diploma nurse educators should be flexible enough to meet the needs of the beginning nurse educators as well as the more experienced ones.

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Chapter 1

Introduction

The nurse educator's role is complex. She is expected to be "an educator, researcher, scholar, consultant, and community resource person simultaneously" (Infante, 1986, p. 94). The many different roles that a nurse educator must perform can be a source of considerable stress. The realization that it is impossible to meet all the expectations of the role may result in conflicts and frustrations for the incumbent (Dick, 1986, pp. 252-259; Mauksch, 1982, p. 9; Wood, 1986, p. 213).

Nurse educators in Alberta have received professional nursing education within their particular fields of specialization but not in the art of teaching nursing. This is because in Alberta there is not a formal preservice program that prepares nurses for the role of teaching (Task Force on Nursing Education, 1975, p. 52). However, the majority of these nurse educators

> who have been prepared as clinical specialists eventually take faculty positions for which they will be unprepared to function effectively. It seems that nursing has adopted the controversial practice of other disciplines of hiring individuals with subject matter expertise but not teacher preparation. (Karuhiji, 1986, p. 142)

Even after clinical specialists have been hired to teach, there are very few professional development programs available to help them learn how to teach. Most organizations do not have a clear policy on how to help the neophyte nurse educator. Instead, she is expected to perform her role without the benefit of preparation which is related specifically to the teaching-learning process.

Regardless of the nurse educator's educational background, most of them are likely to have some professional development needs related to

the functions they are expected to perform. The purpose of the study was (1) to obtain a comprehensive picture of the professional development needs of nurse educators employed in diploma nursing schools in Alberta, and (2) to develop a profile of these educators by reviewing the literature on the subject and by surveying the needs of all nurse educators teaching in hospital-based schools of nursing and colleges in Alberta.

Purpose and Research Questions

The professional development needs of Alberta diploma nurse educators have not been scrutinized closely in the past and therefore merit attention given that the 1980s have been called the era of "knowledge explosion." Nursing knowledge has expanded considerably as society's needs for nursing care have become more complex. As a result, the Canadian Nurses' Association (CNA) (1986) and the Alberta Association of Registered Nurses (AARN) (1984) agreed that a change in the educational requirements for nurses entering the profession is necessary. They resolved that the "minimum entry to practice by the year 2000 must be a baccalaureate degree." This is called the EP 2000 position.

This in itself presents a formidable challenge to all nurse educators which will force them to revise, update, and prepare their programs and themselves for the anticipated changes. This new educational requirement is a cause of concern especially for the nurse educators in Alberta who are prepared only at the diploma level (11.4%) and the 8.2% who possess a diploma with some post-basic preparation (The Premier's Commission on Future Health Care for Albertans, 1988, p. 41).

Bearing this in mind, this study was designed to address the

following questions:

1. What are the perceived professional development needs of nurse educators in Alberta's diploma nursing schools relative to the seven specified knowledge and skill areas identified in the study? These knowledge and skill areas are the school of nursing, adult learner, classroom instruction, clinical and theoretical evaluation, school's curriculum, interpersonal interactions, and teaching strategies.
2. To what extent are perceptions of current and desired knowledge and skill levels related to variables descriptive of Alberta's diploma nurse educators?

The answers to these questions were obtained from questionnaire responses from diploma nurse educators in 9 of the 11 diploma nursing schools in Alberta.

Background to the Study

Nurses in Canada are educated in either diploma programs or university baccalaureate nursing programs. In 1988 there were 110 diploma nursing programs in Canada, 20 of which were hospital based. Six of the diploma programs were operated by independent schools of nursing, while the others were located in community colleges, technical or vocational institutes (Canadian Hospital Association, 1988, pp. 185-188).

There are 23 baccalaureate professional nursing programs in Canada. Twenty-one of these programs offer a basic or generic degree in nursing. One program is a special qualifying Master's program which gives the student with a non-nursing degree the opportunity to complete a nursing baccalaureate and Master's degree in three years.

In Alberta there are seven college-based and four hospital-based

nursing programs. Nurses who graduate from a diploma program in nursing may further their education by enrolling in a post-R.N. Baccalaureate Program at the University of Alberta, University of Calgary, or the University of Lethbridge. Courses which give credit towards a Baccalaureate degree in nursing are also available via correspondence from Athabasca University and through university transfer courses offered in community colleges. The University of Alberta and the University of Calgary also offer the basic or generic degree in nursing (Alberta Association of Registered Nurses Publication, 1988-1989, pp. 1-2).

All schools of nursing in Canada must maintain a certain standard of nursing education. This standard is set by the Canadian Nurses' Association (1978). Each province is given the legal authority to register its own nurses. In Alberta, registration with the Alberta Association of Registered Nurses (AARN) is a legal requirement for practicing nurses under the Nursing Professions Act (Alberta, 1983). The Nursing Profession Act stipulates that the Universities Coordinating Council (UCC) can decide on minimal standards for schools of nursing in Alberta, evaluate out-of-province-nurses' qualifications and ability to practice nursing safely in Alberta, and examine issues pertinent to maintaining satisfactory nursing programs in the province.

In Alberta, a student who has successfully completed a two-and-one-half to three-year hospital-based diploma program, a two-year college diploma nursing program, or a four-year university baccalaureate nursing program must register with the Alberta Association of Registered Nurses in order to practice nursing. This is done after obtaining a satisfactory grade on the Canadian Nursing Association Testing Service Examination. Passing this examination indicates that the nurse possesses

at least the minimal competence in nursing knowledge and skills.

The Universities Coordinating Council is also empowered by the Nursing Professions Act to regulate nursing education in Alberta. This Act states that "the qualifications of each faculty member (or professional nurse educator) teaching nursing subjects should preferably be a Master's Degree in Nursing and at least a baccalaureate degree" (Universities Coordinating Council Regulations [UCC], 1982, p. 13). The Act further states that the nurse educator's task is to "facilitate acquisition and modification of nursing knowledge, skills and attitudes to prepare beginning practitioners of nursing, and to enhance the competence of experienced nurses" (UCC, p. 13).

In other words, "nursing education is society's instrument for ensuring an adequate number of qualified candidates for the nursing workforce" (Baumgart & Larsen, 1988, p. 315). As an educator, her major role is to provide leadership and to be a role model:

> She represents the profession . . . and plays an identifiable part in determining the profession's growth and in fashioning the shape of things to come through representing it in intra-mural and extra-mural affairs, through administering its programs through formally teaching its future members, and engaging in and directing its research. (Towle, 1954, p. 5)

An understanding of the professional nurse in society contributes to the development of an understanding of the role of nurse educator. The educator's role is intimately tied to that of the professional nurse practitioner, since a prerequisite to teaching is having a registered nurse certification.

The Professional Nurse Practitioner

In society nurses are perceived as "ministering angels, purveyors of health, collaborators in health care, loyal and cooperative employees" (Williamson, 1976).

> The nurse practitioner's role can be defined as that aggregate of behavior that is expected of one who occupies a given position or office. The choice of behavior is made in consideration of the demands and expectations of other actions within the social group and is a conglomeration of cultural, personal and situational elements. (p. 96)

Society sees nursing as an important component of the health professions which has unique functions. As a result, the expectation is that professional nurse practitioners will be knowledgeable and competent in their fields. However, nursing has changed and is continuing to change dramatically each year. One factor which is contributing to this drastic change is the technological revolution which is expanding in the areas of telematics, biotechnology, robotics, and genetic engineering (Goertzen, 1987, pp. 121-123). Baumgart and Larsen (1988) state that the blueprint for

> nursing practice in Canada is changing in complicated ways, which reflect new health care problems and priorities and a corresponding shift in perspectives about the appropriate societal response to health and illness. . . . Visible changes in the 1980s include the accent on wellness and health promotion and the increasing demand for nurses qualified for emerging specialty roles in acute and long-term care. (p. 77)

Technological changes and the complexity of nursing practice have brought to the forefront the importance of having well educated nurses who are able to function effectively in a variety of settings in today's society.

> The time is right for making remarkable changes in programs preparing professionals in the field of nursing. The future calls for a different and much more extensive education than is now currently in place: A greater understanding of economics, emphasis on ethics and legal issues, introduction to management

> and business, understanding of information technology and artificial intelligence, and greater clinical application are all indicated. (Aydelotte, 1987; Schlotfeldt, 1981, p. 114)

Accompanying the knowledge explosion are technological changes such as the use of computers and better patient monitoring devices (Forte, 1984, pp. 155-158). These factors have served to make the nurse educator's tasks more complex and varied. The multiplicity of the role coupled with the call for accountability in relation to the attainment of educational goals in nursing education (Williamson, 1976, p. 113) highlights the necessity for nurse educators to pursue continuing professional development activities to meet their ever-changing learning needs.

The Professional Nurse Educator

As discussed earlier, the professional nurse educator or faculty member is one who has completed a minimum of a baccalaureate degree. Her major role is teaching either in an academic or clinical setting.

The baccalaureate degree is a generalist degree in that it does not prepare the practitioner to be a specialist in any specific area of nursing. Specialization therefore takes place at the graduate level. The American Nurses' Association (1980) states that "the specialist in nursing . . . is a nurse who, through study and supervised practice at the graduate level (master's or doctorate) has become expert in a defined area of knowledge" (p. 23). The main focus of graduate education has been on clinical specialization and proficiency in nursing research, with little or no emphasis placed on nursing education as a field of study or practice.

Recognition of the need for adequate preparation of nurse educators

is not evident in educational programs available for nurses wishing to prepare themselves for the role. There are very few Canadian institutions which include nursing education as an area of study in the curriculum. This is a setback for nurse educators, given that writers such as Overstreet (1941), have stressed the importance of learning and teaching competence:

> The adult educator cannot be simply a person of good will and generous impulses--and large ignorance. He must know something well. . . . he must have some expertness that gives, as it were, a vertebrate character to what he says and does; he must have a sense of relationships broad enough to redeem him from narrow specialization . . . with a power to think and act in terms of real problems. (p. 244)

The emphasis on nursing practice rather than on education has been attributed to the strong resistance by nursing administrators to having nursing education in institutions of higher learning. As a result, nurses were respected for the services they provided to hospitals rather than for their theoretical nursing knowledge, teaching abilities, and level of educational preparation (Gellett, 1981, p. 66; Palmer, 1985, p. 105).

As nursing began the transition from the apprenticeship system in hospitals to education in academic settings in the early 1960s, a difference between the nurse educator and nurse practitioner roles emerged both in the programs preparing nurses and in nursing practice. The focus of the nurse educator's attention was directed toward mastery of the academic skills of curriculum development, teaching-learning methods, research, and publication (Spero, 1980, pp. 1-6).

The difference in the nurse educator's role and that of the nurse practitioner created considerable controversy. The nurse educator was seen as "forfeiting her role as a nurse . . . and felt it necessary to

prove her worth as practitioner and educator" (Sleightholm, 1985, pp. 29-30). The practitioner, or service role, took precedence over education, and education as a field of study never truly became an important component of preservice nurses' training in Canada.

A number of writers have suggested that to improve general teaching performance and to be an effective nurse educator, a working knowledge of adult learner characteristics, learning theories, curriculum development, teaching strategies, and role socialization must be thoroughly addressed (Davis & Williams, 1985, p. 20; De Neve & Piet, 1982, p. 543; McCloskey & Grace, 1985, p. 895; Sleightholm, 1985, p. 30). Since the majority of Alberta's nurse educators cannot lay claim to adequate preparation for their current educational roles, it would seem that the perceptions of diploma nurse educators should be a valid component for the development of programs designed to meet their needs.

Conceptual Framework

The generally accepted purpose for undertaking professional development activities is to update and improve professional knowledge, skills, attitudes, and overall performance. A review of the literature related to professional development indicates that a major component of the program planning is to assess the learning needs of the target group (Centra, 1980, p. 94; Grabowski, 1982, p. 61; Kaufman, 1987, p. 144; Wlodkowski, 1985, p. 105). Such assessment should address general areas such as the organization, the student or learner, and the professional--in this case, the nurse educator.

The purpose for assessing such needs is to develop effective programs which will result in behaviors for an effective nursing

education. A need is defined by Sork (1986) as

> a verifiable description of a performance capability or outcome which is thought to exist. It is a description of, or specifications for a parallel performance, capability or outcome which might exist in the future and which is considered more desirable than current performance, capability or outcome. (p. 262)

This concept of "need" indicates that a gap or discrepancy exists between the "present state of affairs, and a desired state of affairs" as indicated by the owner of the need or by an authority of need (Beatty, 1981, pp. 36-46).

When a person perceives this discrepancy and feels compelled to actively work at eliminating it, then a need is being expressed. The individual will participate in activities designed to improve or reach a more desirable performance level. A behavior change is evident when the desired state of affairs sought is achieved. Sork's (1986) definition of need implies that when needs are identified there exists a desire to do something about eliminating them. It would, therefore, appear that the process of identifying needs with a view to developing appropriate programs to meet those needs is a sound and realistic approach to adopt.

The professional development needs assessment model depicted in Figure 1.1 represents a system which is comprised of certain elements--organization, student, and educator; and subsystems (goal and expectations), which are all interrelated. Needs, whether they are personal, professional, or developmental, act as the internal forces that determine the direction and goals of behavior in the organization, student, and educator (Hoy & Miskel, 1982, p. 60).

An explanation of the basic elements of the system are:

1. The **organization** (in this case, the school of nursing) is defined in

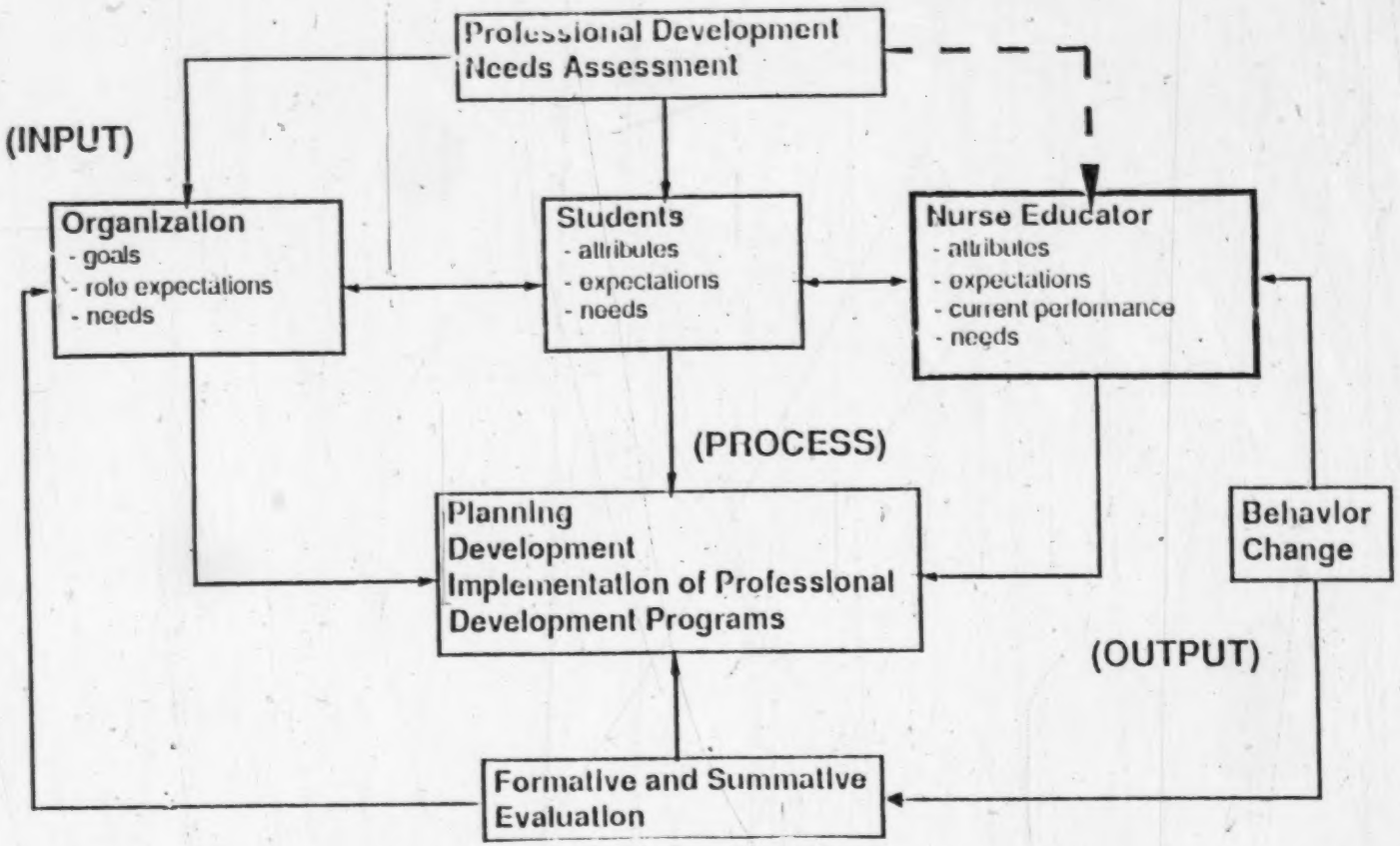

Figure 1.1. Model for professional development needs assessment (adapted from Castetter's [1976] interacting forces impinging on personnel performance)

terms of its goals, role expectations, and needs which function to ensure that the mission of the total system is achieved.

2. The **students** are defined in terms of their attributes, expectations, and needs. Attributes include age, experience, and level of education; these are the main factors which dictate what their needs and expectations are of the organization and of the nurse educator.
3. The **nurse educator** comes to the teaching-learning environment with certain attributes and expectations. These attributes and expectations would affect her current performance in the organization and define her professional development needs.

The organization, students, and nurse educator comprise the "Input" component of the professional development needs assessment model.

When programs are implemented, behavior changes in the organization, student, and nurse educator should be evident. This is the "Output" component of the system.

Although not part of the study, the "Process" aspect of a total professional development model is depicted for clarity. Once the organization, student, and nurse educator needs are known, the process of planning, developing, and implementing programs to meet identified needs commences. Part of this process involves formative and summative evaluation, which is necessary to ensure decisions regarding programs are appropriate and to address relevant needs.

The component depicting the nurse educator in Figure 1.2 can be seen as focussing primarily on aspects of her role as educator, although other roles such as researcher, scholar, and consultant have significant impact upon the teaching-learning process. It is evident that the needs of the organization, students, and nurse educator are all interrelated. Changes

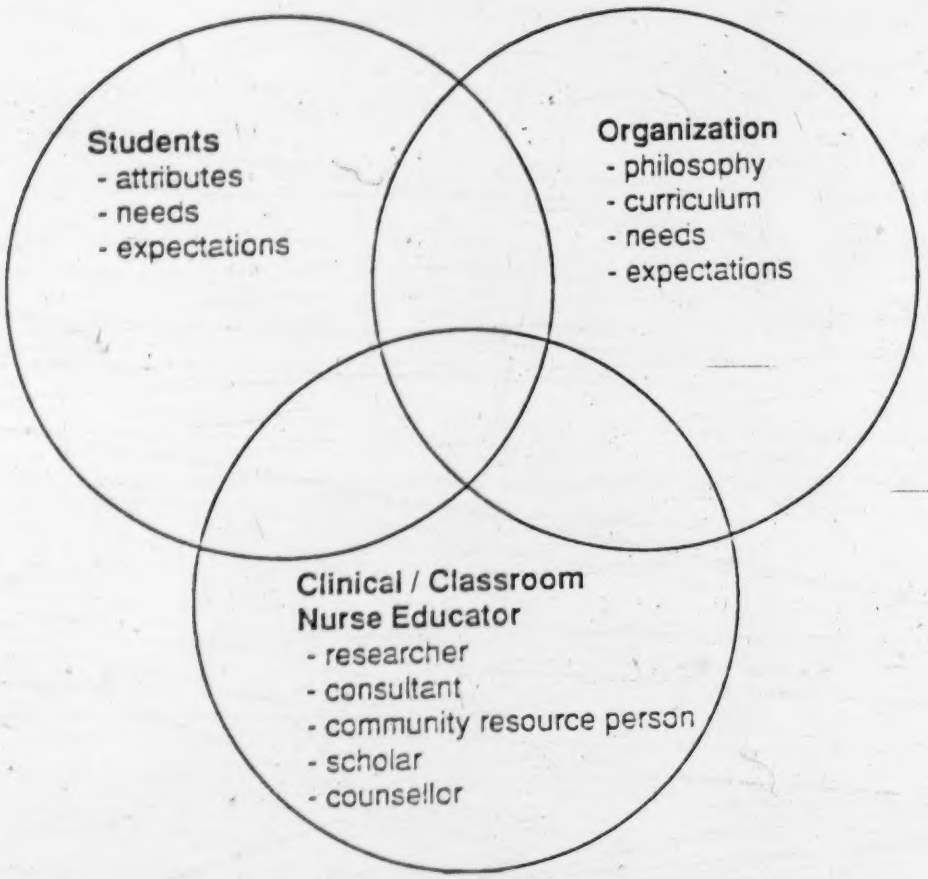

Figure 1.2. Factors affecting the nurse educator's performance.

in the organization's philosophy, curriculum, needs, and expectations will affect the nurse educator's performance in that her professional development needs may change. The same is true if the students' attributes, needs, and expectations are altered in any way.

The depicted roles are related to the nurse educator's teaching expertise in clinical and classroom settings. She is expected to possess adequate knowledge and skills related to (a) the school of nursing, (b) adult learner, (c) classroom instruction, (d) evaluation of clinical practice and classroom theory, (e) the school's curriculum, (f) teaching strategies, and (f) interpersonal relationships. These are the seven identified need areas of this study.

Apps (1981, pp. 66-80), in his book The Adult Learner on Campus: A Guide for Instructors and Administrators, concluded that the teacher's content expertise and her understanding of the learner are two factors necessary for effective teaching behaviors. Her knowledge and skills in classroom and teaching strategies are important in bridging the gap between the two. Such knowledge and skills are enhanced by participating in professional development activities and ongoing research.

With regard to the organization and the community, an understanding of the socio-political climate and the philosophy and mission of the organization is necessary. Such an understanding would enable the educator to be more effective in her teaching because she would have acquired a general knowledge of the socio-economic and demographic characteristics of her students and thereby should be cognizant of their needs and aspirations. This knowledge would make it easier for her to maintain good interpersonal relationships with the students. By having a general understanding of the organization and student needs, the nurse

educator can determine her own professional development needs based on her current knowledge and skill levels, current performance, and expectations of her role.

In this study, professional development needs of the diploma nurse educator were obtained by asking respondents to rate their current and desired knowledge and skill levels in seven specified areas. The conceptual and theoretical foundations for the study are presented more fully in the review of the literature in Chapter 2.

Significance of the Study

Although the majority of practicing nurses in Canada are prepared in diploma nursing programs, there is very little research addressing the professional development needs of nurse educators who teach in those programs. Studies by Watson (1985, p. 25) and Mirosh (1988, p. 9) predicted that by the year 2010, about 12% of the Canadian population will be older than 65 years. The impact of the aging Canadian population on the future of the health care system will be dramatic. It is further predicted that about 40 to 50% of the health care dollars will be spent on this group because of anticipated changes in their health status. This segment of the population is likely to develop chronic and long-term problems. Nurse educators are expected to prepare their students to cope with these clients as well as

> the growing complexity of professional practice [which] has been associated with increased risk in nursing procedures, and higher risk procedures produce more legal actions. It can readily be appreciated why knowledge of the law, legal processes, the justice system, and client rights are important yet few nursing schools and continuing education programs deal with this subject. (MacPhail & Kerr, 1988, p. 196)

This implies some urgency in this area and a certain degree of

accountability on the part of the nurse educator. She can be held responsible for the performance of her students. As a result she must keep abreast of the law and try to reduce her risks and liability by maintaining her knowledge and skills level in relation to approved nursing practice (Klein, 1986, p. 98; McKerrow, 1987, pp. 67-69).

The greatest challenge for nurse educators in the future is how to educate their students to cope with the deleterious effects of lifestyle factors such as poor dietary habits, smoking, and alcoholism. The emphasis on preventative measures, self-control, self-help, and wellness promotion that will be necessary may find nurses practicing in far different settings than they do today (Aydelotte, 1987, pp. 114-120; Jackson, 1985, pp. 59-66; Norman, 1986, p. 75). Changes in the nature of nursing practice will be evident in that homecare, long-term care, and rehabilitative nursing will increase, and graduate nurses must be adequately prepared to cope under such diverse conditions.

Finally, given the complexity of the teaching-learning process, the diversity of the nurse education and student backgrounds, and the need for higher educational preparation for nurses in general, it is important to identify what diploma nurse educators perceive as their professional development needs. Such an understanding will provide insight into curricular and instructional concerns in the diploma nursing programs.

The study addressed an important educational issue and is expected to make the following contributions to nursing knowledge and practice:

1. to provide an analysis of diploma nurse educators' perceptions regarding their need for further professional development, thereby enabling school of nursing administrators to address these needs when planning programs;

2. to give school of nursing administrators an opportunity to appreciate the complexity of the tasks nurse educators perform, thus enabling them to determine if their existing instructional practices for staff or students are appropriate; and
3. to provide information about the personal and professional characteristics of diploma nurse educators in Alberta and the relationship to their perceived professional development needs.

The results of this study may

1. influence future decision making by nursing schools administrators and the Government of Alberta with regard to any future support for programs addressing diploma nurse educators' professional development needs; and
2. serve to increase the awareness of diploma nurse educators regarding their instructional practices and through self-evaluation may aid in identifying areas requiring further professional development.

The study has potential to contribute to the basic information necessary for development of relevant professional development programs. Finally, the findings, implications, and recommendations may generate further research in this area.

Assumptions

The major assumptions which helped to define the problem and, subsequently, the methodology used in the study are as follows:

1. Diploma nurse educators are aware of their professional development needs. They have the ability to identify their strengths and weaknesses in relation to specific required knowledge and skills in nursing education.

2. Diploma nurse educators have several alternative ways for meeting their professional needs, such as undertaking graduate studies and attending conferences and workshops, as well as through professional reading.
3. It was further assumed that diploma nurse educators would respond honestly to the questions used in the study as well as demonstrate a positive attitude towards the study.

Definition of Terms

For the purpose of this study selected terms are defined as follows:

College-Based Diploma School of Nursing: A non-university, postsecondary public educational institution offering general academic, technical, or vocational programs including diplomas in nursing.

Hospital School of Nursing: This is a non-university, postsecondary public educational institution affiliated with a specific hospital offering courses leading to the registration for registered nurses.

Nurse Educator/Professional Nurse Educator/Nurse Teacher/Teacher/Faculty: These terms are used interchangeably to describe persons who are responsible for the teaching-learning process of nursing students in approved hospital or college-based diploma schools of nursing. They have completed diploma or baccalaureate nursing programs and are registered with the Alberta Association of Registered Nurses. These persons may also have completed supplementary courses related to professional responsibilities.

Perception of Professional Development Need: This refers to the nurse educator's interpretation and classification of professional development needs according to experience.

Personal and Professional Variables/Data: Refers to characteristics about the nurse educator's age, level of education, type of employment (hospital or college program), years of teaching experience in nursing, and areas of major responsibilities in nursing instruction.

Professional Development: Learning activities that nurse educators undertake formally or informally during employment which would contribute to their personal and professional growth and improve their effectiveness as nurse educators.

Professional Development Need: A need is a lack of something essential, desirable, or useful. A discrepancy or gap in the diploma nurse educator's level of competence required for her to function effectively in her role is referred to as a professional development need (Knowles, 1980).

Delimitations

The major delimitations of the study are as follows:

1. The population used in the study consisted of nurse educators teaching in diploma nursing schools in Alberta.
2. Since the study was concerned only with diploma nurse educators, perceptions of other agencies or educators who contribute to the education of nurses were not addressed.

Limitations

The major limitation of this study is that its results apply only to diploma nurse educators in Alberta at the time the study was conducted. The results cannot be generalized to

1. nurse educators involved in teaching nursing at the university level; and
2. nurse educators in other time periods.

The information obtained represented the perceptions of diploma nurse educators, who are not the only ones exclusively involved in nursing education.

Organization of the Thesis

In Chapter 1, an introduction to the research is presented. The background and conceptual framework are discussed, significant terms are defined, and the major assumptions, delimitations, and limitations are provided.

The second chapter offers a review of the literature related to general professional development and the diploma nurse educator's professional development needs. Included among the topics discussed are the need for professional development, assessment of professional development needs, methods of assessing professional development needs, the importance of the seven specified knowledge/skill areas to the nurse educator's role, and the need for adequate preparation for the nurse educator's role.

Chapter 3 describes the research methodology, including a description of the population, sampling techniques, and instrument development. Data collection and validation procedures are also presented.

Chapter 4 presents a description of the personal and professional profile of the respondents.

The results of the analysis of data are presented in two chapters.

Chapter 5 includes an analysis of the nurse educator's perceived need for professional development in the seven knowledge/skill areas examined. These knowledge and skills are analyzed in relation to age, highest level of education, total teaching experience in nursing, area of major responsibility, and size of school. A discussion of how these variables relate to the respondents' perceptions of their perceived need for professional development is also provided. Chapter 6 discusses the major findings of the open-ended questions.

The last chapter contains the summary, conclusions, recommendations, and suggestions for further research.

Chapter 2

Review of Related Literature

Very little research of a systematic nature has been done within nursing education to address the professional development needs of diploma nurse educators. Consequently, this literature review focuses on professional development activities in general, particularly in colleges and universities. The concepts of needs, professional development needs assessment, methods of professional needs assessment, the need for nurse educators' preparation, knowledge and skills required by nurse educators, and factors contributing to the need for nurse educators to pursue professional development activities are discussed.

Professional Development

Professional development activities for employees are currently "provided by professional schools, colleges, universities and in employment settings" (Wake, 1986, p. 19). Such programs prior to 1970 were concerned with providing information employees would need to function effectively in a specific situation (Stordahl, 1981, p. 84). Of necessity, a large proportion of such programs was devoted to orienting new faculty to personnel policies, job responsibilities, and organizational structure and procedures. Socialization in the philosophy, goals, and objectives of the institution are perfectly legitimate pursuits, but they do not contribute directly to the improvement of the teaching capabilities of the participants, and therefore seldom help educators learn how to teach.

Dissatisfaction of employees with professional development programs

that did not meet their needs prompted "intense activity" and promotion of faculty development as a field of study in the early 1970s (Group for Human Development in Higher Education, 1964, p. 9; Webb & Smith, 1976, p. 86). This was seen as necessary for the revitalization of education in society and for provision of programs that would specifically meet the needs of educators.

As professional development programs evolved, they gained wide support from educators and educational administrators. They became quite distinct and could be classified in three ways or by three purposes: those related to personal/professional growth, curricular competence leading to career advancement, and organizational development (Gaff, 1976, p. 63; Smith, 1980, p. 7; Toombs, 1975, p. 714). The three components are not mutually exclusive; all are necessary for maximum professional development.

Professional development activities are not seen as simply a means to upgrade the participant's knowledge and skills but rather as an effort to "incorporate more direct attempts to improve instruction, plan continuous career development, fashion mutually beneficial relationships with the institution, and even foster aspects of personal development" (Gaff, 1978, p. 8; Konrad, 1973, pp. 47-52).

Because of the extensive knowledge and expertise required for faculty development educators, it was suggested that their qualifications include having "an understanding of the politics of change; a knowledge of system design, production of instructional materials and an awareness of what evaluation can and cannot do; and at times the ability to serve as evaluator" (Diamond, 1980, p. 51). Such qualifications are difficult to find in one individual, and therefore many organizations had

inadequate professional development programs for a long time due to lack of qualified personnel. However, over the past decade professional development educators have become more specialized, and the nature of the professional development programs has changed, with more emphasis being placed on accurate needs assessment and programs designed specifically to address those needs.

The Need for Professional Development

The success of professional development programs depends on accurate assessment of the participant's needs and expectations. The assessor should start where the participants are, and programs should be developed collaboratively with them, allowing for flexibility on how programs are presented because needs are generally dynamic in nature (Henderson, 1980, p. 5; Wergin & Munson, 1976, p. 299).

The need for professional development has become even more crucial because education has entered the era of accountability. The nature of educators' accountability is related to the tasks they are called upon to perform. This means that there should be "specific criteria upon which the fulfillment of responsibility will be judged . . . and the degree of fulfillment of this responsibility will be judged by the performance of students or aspiring graduates against set criterion behaviors" (Bruce, cited in NLN, 1976, p. 3). It is postulated that the concept of accountability removes the onus of learning from the student and links success with the educator's performance, that is, if the student fails the instructor did not teach well.

In addition to accountability, other factors identified as creating the necessity to participate in professional development activities are

the increased complexity of instructional technology in classrooms; the diversity of needs, goals, and experiences students bring to the teaching-learning environment; and uncertainty about the extent to which preservice training in university nursing programs prepares graduates to teach. The lack of adequate preparation and the difficulties some nurse educators experience in the teaching-learning environment may be due to the need to put theory into practice and to develop a sound knowledge of adult learning theories as a requisite for improvement in teacher effectiveness (Gleazer, 1976, p. 2; Morgan, 1971, p. 3; O'Banion, 1972, pp. 85-86).

Finally, all educational institutions are affected by the downturns in the economy and must become innovative so that they can develop good, but cost-effective programs to attract students in order to stay upright through changing economic currents (Forte, 1984, p. 155; NLN, 1985, p. 3; Smith, 1980, p. 19; Stordahl, 1981, p. 84).

Assessment of Professional Development Needs

Needs assessment is a complex and multidimensional process which is generally recognized as an important step in the planning of professional development programs. Several program planning models regarding the assessment of needs have been developed; through these it is possible to gain an understanding of the process. These frameworks may serve to help develop appropriate programs which have the potential to contribute to improvement in nurse educators' performance.

There are several interpretations of what constitutes a "need." One such assumption is based on a framework in which five basic needs form a hierarchical foundation (Maslow, 1954, p. 10). These needs account for

the individual's growth and progress or lack of same in life and must be satisfied sequentially from lower to higher needs to ensure satisfaction, creativity, and maximum self-expression.

Murphy (1955), another proponent of the need theory, hypothesizes that needs are inborn. He categorizes them into four distinct areas:

1. Activity needs are concerned with manipulation and exploration as is evidenced in healthy individuals;
2. Sensory needs are concerned with perceptions in the environment and the need to seek clarity and avoid confusion;
3. Visceral needs are related to the body's vital organs; and
4. Emergency needs are responses designed to avoid injury, threats, and attacks (p. 88).

A third theory of human needs comes from the work of Knowles (1980), who viewed a need as the gap between a current level of competency and one higher which is perceived as better and necessary for improved performance. Fulfillment of this need would benefit the individual, society, and the organization (p. 85). Sork (1986) concurred with Knowles' concept of needs; however, he reduced some of the ambiguity by stating that needs are verifiable performances, capabilities, or outcomes for which a more desirable behavior is required, thereby making it possible to apply value judgments in determining priority (pp. 261-266).

Other writers conceive of the concept of needs as "felt or expressed" by the individual. The felt or expressed needs serve as a motivation for learning (Grabowski, 1982, pp. 60-65; Monette, 1977, p. 116; Tobin, Hull, & Yoder Wise, 1979, p. 991). A desire and readiness to learn is dependent to a great extent upon the needs and abilities of the learner at the time of learning. Havinghurst (1956) identified this

need awareness as the "teachable moment."

Regardless of how one classifies and interprets needs, "the importance of a well executed needs assessment must be done to ensure programs are relevant and meet participants' learning needs" (Knox, cited in Betz, 1984, p. 39). Needs assessment, therefore, is defined as a systematic method designed to gather and analyze information from a target population in order to make decisions about specific areas of needs and to match resources to demands (Pelberg, 1979, pp. 141-157; Schoen, 1979, pp. 3-18).

An accurate needs assessment serves as a means to ensure that program objectives and goals are clear and consistent with individual, organizational and societal expectations and needs. A number of researchers (Brackhaus, 1984, p. 233; Mocker & Spear, 1979, p. 93; Witkin, 1984, p. 18) have indicated that initiatives and suggestions about course development come from the learner. The learner's participation in her own needs assessment and program planning will serve to maintain the relationship between relevant theory and practice, thus ensuring that participation in such programs will create a change in behavior that is considered to be an improvement. Another recommendation is that programs should incorporate formative and summative evaluation to monitor program effectiveness.

Methods of Assessing Professional Development Needs

Many approaches are used in assessing professional development needs of educators. However, student evaluation and peer reviews, along with self-evaluation and administration observations in classrooms, are the most common methods. Each has its strengths and weaknesses but serves in

some way to provide teachers with feedback on their effectiveness, which in turn may help in self-improvement (Hulsmeyer, 1986, p. 19; Kronk & Shipka, 1980, pp. 9-11; Lacefield & Kingston, 1983, p. 278; Overall, 1983, p. 33; Wood & Matthewman, 1988, p. 131).

Students are the recipients of instruction; consequently, their learning may be the best indicator of whether or not a need exists. Therefore, one of the key sources of information about the nurse educator's performance is student evaluations of instruction. Major concerns regarding the utilization of the student evaluation method have been expressed by many writers. Brooke (1984) refers to the "ability of the student questionnaire to measure what it is supposed to measure" (p. 5). Scriven (1981) stated that questionnaires generally do not address such things as choice of subject matter, course development, laboratories, textbooks, articles, and participation in curricular committees (p. 253). On the other hand, many writers indicated that when evaluative survey instruments ask the correct questions, students' ratings of faculty appear to be reliable and valid (Curtis, 1981, p. 27; Miller, 1985, pp. 1-16; Stimca, 1980, p. 20).

The second most commonly used and practical method of assessing professional development needs is peer review, which can be very effective in measuring faculty effectiveness and in identifying needs. Peers have the ability to assess depth of knowledge, teaching strategies appropriate to the level of the student being taught, and the nurse educator's use of "self" in promoting curiosity and enthusiasm for the course she is teaching. However, personality, politics, and friendships may affect the reliability and validity of the data. Hence it is recommended that its use should be monitored carefully (Bell, 1984,

pp. 18-27; Brannigan & Burzon, 1983, p. 287; Litwack, 1985, p. 152).

Another method frequently utilized is observation of the educator's performance at work by her administrators or course managers. Such visits enable the evaluator to observe the educator in action and furnish information on the teaching-learning environment, student/teacher interactions, relationships in the classroom, and students' reactions towards the subject being taught (Finch & McCough, 1982, p. 148). This method is considered useful in providing immediate contact with important events and serves to collect data on teaching activities that would otherwise be lost (Evertson & Holley, 1981, p. 90; Finch & McCough, p. 148).

Although the observational performance evaluation method is commonly used, there are many concerns surrounding its use. First, random visits to the educator's classroom may not effectively assess teaching performance and cannot be considered valid. The reason is that these assessments are not ongoing, and classes observed may not reflect typical classroom performance (Duckett, 1980, pp. 25-35; Evertson & Holley, 1981, p. 90). Many teachers perform poorly when they are being observed, and this, combined with the evaluator's personal biases and prejudices, may portray the teacher as being ineffective when actually she is not (Scriven, 1981, p. 253). Some writers recommended that both the evaluator and educator have a clear understanding of the observation procedures. Agreement should be reached in advance of the observation about how the information would be used and how feedback regarding performance would be transmitted to the teacher (Duckett, pp. 35-40; Evertson & Holley, pp. 90-105). If those guidelines are observed, then some of the problems associated with the classroom observational

practices may be reduced considerably.

Self-evaluation involves rating one's performance in relation to one's goals and expectations. Evaluating oneself is not an easy task, in part, because of the risk of underrating or overestimating one's capabilities (Strother & Klus, 1982, p. 130). The accuracy of self-evaluation depends on the individual's self-esteem. Hence, at times this method's accuracy and objectivity are questionable and are not always considered reliable or valid. Bridges and Groves (1984, p. 26) suggested that self-evaluation when combined with students' ratings seems to produce positive changes in teacher behavior. If utilized correctly, they can be very useful in assessing professional development needs of educators. Seldin (1980, p. 13) reported that, if carefully and honestly performed, teacher self-appraisal can be of inestimable value, not only to the accuracy and reliability of the collective judgment of teaching performance, but also as an immediate and effective impetus to improve teaching performance.

Duckett (1983, p. 13) suggested that in order to improve and reduce problems associated with self-evaluation, "programs" should be developed which allow teachers to sit in on other classrooms, observe expert teachers on videotapes, see themselves on videotape, and obtain student ratings. All of the above methods, if utilized correctly, can be very useful in assessing professional development needs of educators.

In general, good professional development programs provide mechanisms for meeting individual nurse educators' learning needs and establish patterns for effective teaching performance. Assessment of professional development needs must have clear directions for both the

educator and assessor about expectations and how teaching performance will be evaluated and the benefits of such evaluations.

Required Knowledge and Skills

Nurse educators require specific knowledge and skills to teach nursing. Seven knowledge and skill areas have been identified as important for professional development of nurse educators. These areas relate to the core characteristics that are necessary for a person to be an effective nurse educator, thus ensuring that both the teaching and the learning experiences are rewarding to the learner and educator. Generally, the nurse educator's level of competence is measured by how knowledgeable or skillful she is in these areas. The seven knowledge and skill areas are discussed in the following order: (1) the school of nursing, (2) the adult learner, (3) classroom instruction, (4) evaluation, (5) school's curriculum, (6) teaching strategies, and (7) interpersonal relationships.

The School of Nursing

The literature review suggests that the quality of learning in any educational institution is usually significantly influenced by environmental and organizational factors. These factors in the school of nursing include its administrative staff, nurse educators, physical environment, mission statement, financial support, and other available resources (Barron, 1984, pp. 169-207; Carter & Doyle, 1987, pp. 142-160; Wilson, Shulman, & Richert, 1987, pp. 104-124).

A prudent nurse educator must be knowledgeable about the organization in which she is employed. This knowledge does not extend

only to understanding her role expectations, but she also needs to gain an understanding of the "heritage, development and history of nursing education" in the school. She should know the bioethical, legal, economic, and political concerns as they relate to the school of nursing" (Ellis & Harthy, 1984, p. v; Leinhardt & Greeno, 1986, pp. 75-95). Does the school of nursing have a good reputation and public image? What opportunities are available to its graduates? Are there any future plans for the school of nursing that would impact on the quality of its programs or which would affect the employee's job security?

Such understanding can only benefit the nurse educator, enabling her to judge the extent to which the organization's philosophy and beliefs about "humans, students, teaching and learning, knowledge, other instructors, and the purpose of the educational institution" are compatible with her own philosophy (Apps, 1981, p. 80). The information should help her in providing satisfactory information to students as well as establishing sets of expectations for her own role performance. This knowledge should also assist her to set a benchmark by which to evaluate the quality of students' performance as well as her own.

The Adult Learner

Higher education in Alberta, and around the world, in general has grown rapidly in the last two decades both in the number of institutions and in adult student numbers. Nursing students are considered to be adult learners.

Today's adult learners have diverse backgrounds and

> are more often women than men . . . , often between the ages of 20 and 29, they have a better formal education than those who do not return, and they are likely to be employed in professional or technical work. . . . They return to school to begin an occupation, change occupation, improve their occupation, due to changes in life situations, or simply for life enhancement. (Apps, 1981, pp. 36-37)

With such major differences in students' knowledge and skill levels, adult educators must be very well prepared for their responsibilities.

Brough (1981), in looking at the continuing educational needs of adult educators, identified 69 competencies required by educators who teach adults. Some of these competencies involved:

1. valuing individuals and possessing the ability to work cooperatively and effectively with them;
2. having the ability to assess the adult learner's needs and developing clearly stated goals and objectives within the confines of the curriculum to meet those needs;
3. understanding the adult learner's reasons for pursuing further education and helping him cope and adjust to changing societal expectations;
4. creating an environment conducive to learning; and
5. selecting and using relevant instructional materials and techniques to meet learning needs.

Lindsay (1984), on the other hand, felt that teacher effectiveness in adult education revolved around the use of good communication skills; using the learner's past experiences effectively; having good assessment, planning, instructional, and evaluative skills; and creating a climate in which learning can take place without fear and trepidation (pp. 2-7).

According to Moon-Birkey (1984), the future directions for adult educators and adult learners should involve the ability to identify

different learning styles and to develop appropriate strategies to meet individual learning needs in a variety of educational settings (pp. 24-38).

Carter (1983) indicated that some criteria to be considered when preparing adult educators for their roles should include understanding

1. all aspects of the employing organization that will impact on the teaching-learning process and the educator's ability to meet students' needs. Such factors may include the sociopolitical and economic systems;
2. curriculum development, implementation, and evaluation and adapting the curriculum to meet individual learning needs;
3. the psychology of teaching and learning in adult education;
4. how to promote student independence by helping students acquiring skills to move from novice to expert practitioners in their chosen profession; and
5. participating in research activities in order to interpret concepts related to one's own professional practice and to explain same to students and other interested parties.

Carter suggested that the above criteria should be included in all adult educators' educational preparation (pp. 73-82). Researchers such as Elsdon (1984) and Chapman (1987), in examining the training needs of adult educators, also agreed with the preceding statements regarding the needs and skills required by adult educators to function efficiently in an educational environment.

Writers such as Apps (1981, p. 166), Kidd (1973, p. 34), Knowles (1950, pp. 32-36), and Wlodkowski (1985, pp. 12-14) emphasized that understanding the general principles that are important in the teaching

of adults with varied experiences and educational preparation, having the capability to encourage the student to enjoy learning more, working harder, and having a sense of achievement constitute good teaching behaviors and increased adult learning.

Classroom Instruction

Instruction is described in Webster's Dictionary (1984) as teaching or imparting of knowledge in a systematic manner. Several writers agreed that there is no one way that is automatically better than another. In nursing, as in most other teaching areas, the whole process is dependent on what the nurse educator wants to achieve.

Studies by Barrow (1984, pp. 169-179), Duckett (1980, p. 83), and Feldman (1976, pp. 243-288) indicated that the most important factor that impacts on the teaching-learning process is the learning climate. A favorable environment is considered to influence profoundly the quantity and quality of learning that takes place. Erickson (1984) suggested that teaching competence involves the ability to reach all learners and to create a rich and multidimensional environment that promotes learning (p. 4). Bullough (1978) stated that, besides creating an environment conducive to learning, effective classroom instruction involves the intelligent use of a variety of instructional materials appropriately selected to challenge and help the learners reach their peak of intellectual capabilities (pp. 1-18). This is conceived to be the goal of what classroom instruction should achieve and is considered to be one of the most important roles of the nurse educator.

Evaluation

Evaluation is an important aspect of the teaching-learning process which should be carried out regularly and as part of the ongoing learning process (Gagne, Briggs, & Wager, 1988, p. 6; Stiggins, 1986, pp. 271-286; Stiggins & Bridgeford, 1985, pp. 5-17).

The function of evaluation was described by Shadish (1987) in the following terms:

> A major justification for evaluation is the production of immediately useful knowledge that can be used to solve problems and meet the needs of the users. Evaluation should provide information that can translate into improvement of policies, programs and people. (p. 530)

Evaluation for the nurse educator is not an easy process because she functions in two environments--the classroom and clinical setting. Both settings are quite different and require different knowledge and skills. In the classroom, theoretical concepts are presented, while in the clinical setting, the theory is put into practice. This seems to represent the best of both worlds, but to function effectively in either world requires a great deal of knowledge and expertise in evaluation and innovation (Eisner, 1982, pp. 392-431; Gall & Marsdon, 1982, pp. 22-26; Milde, 1988, pp. 425-434). However, what is important in both settings is that the adult learner fully understand the purposes of the evaluative process. In all instances, the nurse educator must remain sensitive to the learner's response during the process (Carpenito & Duespohl, 1981, pp. 146-150). This is because "to most adults the words 'test,' 'quiz' and 'examination' call forth such unpleasant memories that it is often difficult to use them in a voluntary adult group" (Knowles, 1954), and they thus create a lot of stress in the learner.

According to Litwack, Linc, and Bower (1985), the nurse educator

should conceive of evaluation as having multiple possibilities while being flexible, sensitive, non-judgemental, and honest in her approach to the process (pp. 3-13). This approach will enable students to develop confidence in the evaluative system, as well as to seek help when their knowledge and skill levels are determined to be unsatisfactory.

Evaluation is a "necessary evil" in the teaching-learning process with enormous potential to benefit the individual being evaluated as well as the evaluator. However, if this is to be achieved, significant change in values and the education of evaluators will be required. Reilly and Dermann (1985) pointed out that nurse educators require advanced preparation for the role of clinical nurse educator. This is also true for classroom instruction and evaluation. Evaluation in schools of nursing must be developed "in consort with theory and as an integral part of a systematically developed curriculum" (pp. 14-15). Litwack, Lipe, and Bower (1985) suggest that "if evaluations are done fairly and objectively and used as teaching and learning tools, they can contribute greatly to an atmosphere of mutual respect and trust between faculty and students that creates an ideal climate for learning and productivity" (p. 3).

School's Curriculum

The curriculum comprises all the courses and learning experiences offered by a school of nursing. More precisely, the curriculum is the framework through which the course aims and objectives are realized. It outlines the conceptual framework around which the program aims and objectives revolve. Generally, the essential concepts and subject matter to be covered as well as the setting and characteristics of the learners

must be addressed in a curriculum (Barrow, 1984, p. 3; Chaters, 1975, pp. 429-430; Jenkins & Shipman, 1975, p. 4; Stenhouse, 1975, p. 3).

The curriculum also outlines evaluative measures and gives a general description of what the final product should look like at the completion of the courses. The needs and interests of the learner and a statement of some of the precise learning experiences that may best accomplish the objectives of the program are outlined (Barrow, 1984, p. 8; Lynch, 1986, p. 133).

An understanding of the school's curriculum should aid the nurse educator in the presentation of curricular information. Thus, the overall objectives of the curriculum can be achieved through effective communication of the basic strategies involved in implementing any curricular model.

Teaching Strategies

Another important area of knowledge and skill for nurse educators relates to teaching strategies. Nurse educators must employ careful plans or strategies to meet educational goals and objectives. The effectiveness of such strategies in education resides in the intelligent use of several approaches that offer educational alternatives to help diverse learners reach a variety of learning goals (de Tornay & Thompson, 1987, p. 6; Foley & Smilansky, 1980; Newman & Brown, 1986, pp. 188-189).

The strategies utilized by the nurse educator depend on what goals or objectives she would like to achieve. Because of the nature of learning, no one single method of communicating content, knowledge, skills, and attitudes can be utilized. However, whatever method is utilized, the teaching-learning environment should be exciting and

stimulating. By becoming familiar with and using a variety of teaching strategies, the nurse educator may become aware of which methods work in particular situations and which ones do not. She is then able to develop a repertoire of strategies that will contribute to effective teaching behaviors.

Whether the nurse educator is teaching in the classroom or in a clinical setting, there are certain essential behaviors that are considered effective and appropriate. She reinforces learning through the use of words, visual materials, models, examples, and real objects such as patients in order to enable the students to apply some basic principles to specific situations. She may "seek simulated work situations" or guided practice

> to help students develop the psychomotor skills needed to practice nursing. She may ask questions to stimulate students, as well as to find out if they understand what has been taught, to motivate students toward learning through the use of set induction. (de Tornyay & Thompson, 1982, p. vii)

The traditional lecture method has been criticized considerably, but Bowman (1986) stated that with "diminishing resources, large teacher-student ratios, and increasing pressures to provide nursing education more efficiently and effectively with the resources on hand, the necessity of lecturing to large groups of students has become a reality for nursing faculty" (p. 226).

Group discussion, one strategy used by nurse educators to discuss or debate issues or to gain consensus, is commonly used. These discussions take the forms of brainstorming, buzz sessions, clinical seminars, or conferences designed to assist students to develop good interpersonal skills as well as creative problem-solving and decision-making skills. Many other strategies may be used singly or combined, but they must fit

the goals the instructor seeks, be appropriate for the learners, and be compatible with the organization's philosophy, the setting, and the educator's own competencies, expectations, goals, and philosophy.

Interpersonal

Teaching is a social activity in which the nurse educator relates to and interacts with students and vice versa. It is the rare nurse educator who is not concerned about maintaining good student-teacher relationships, since good relations contribute positively to the effectiveness of the teaching-learning process. Thus, interpersonal knowledge and skill is another important area of professional development for the nurse educator.

According to Joyce and Weil (1980), "to tend to the personal but not the social, or the informational but not the personal, simply does not make sense in the life of the student" (p. 13). The nurse educator must take a holistic view of her students in all situations and endeavor to share her whole person as well. This means that

> she does not see teaching as one facet of her life . . . but recognizes that her effectiveness is wrapped up in the totality of who she is. This totality is communicated not only by what is said, but also in actions, facial expressions, and the feelings that are communicated about both students and the subject matter. (Apps, 1981, p. 113)

Brockett (1983) suggests that to foster good student-teacher relationships, the educator must become familiar with the characteristics of the student body (pp. 7-9). Other researchers believe she should create a climate in which the learners feel comfortable and safe to share their experiences and feelings. The nurse educator's awareness of the learning potential of her students and her ability to encourage them to

become intrinsically motivated in order to achieve their learning goals are behaviors that contribute to good student-teacher relationships. In addition to the above, the nurse educator must be empathetic and sensitive to her students' social and emotional needs and know appropriate responses or strategies to help them cope with their problems Bruner, 1986, pp. 197-200; Ericksen, 1984, p. 12; Lefrancois, 1985, p. 318).

Nurse educators interact with their own peers and employers and therefore also have personal, professional, and developmental needs. All of their actions have consequences; consequently, poor communication and interpersonal skills may inhibit the ability to respond to peers in an appropriate and helpful way. A nurse educator

> requires the ability to grow and expand her own potential and the capacity to teach herself more varied and interesting ways of coping with her own need to develop. The environment for personal growth is greatly enhanced when the educator can define her present situations and see the alternatives. (Joyce & Weil, 1980, p. 19)

The personal and professional satisfaction which may be achieved through maintaining knowledge at a current level, improving relationships with peers, and using feedback from a variety of sources to increase teaching effectiveness and respect among peers should be reason enough to encourage the nurse educator to explore the potential good interpersonal skills hold for her own growth and development.

Taken collectively, the discussion of the seven specified knowledge/skill areas highlights the importance of having nurse educators who are skillful in orchestrating effective learning experiences so that students can build both their skills and understanding of program objectives, goals, and content. Considerable commitment and expertise

are required to shape the teaching and learning milieu in order to accomplish a larger and more carefully specified number of goals and objectives for everyone involved in the teaching-learning process. Considering the complex tasks and multiplicity of the nurse educator's role, it is undoubtedly timely that Alberta's diploma nurse educators' perceptions of their current and desired performance in those areas undergo greater scrutiny and examination to identify professional development needs.

Need for Nurse Educator Preparation

As discussed before, nurse educators practice in a variety of settings. Their roles are complex and varied. Although the majority of nurse educators in Alberta (89 percent) possess a baccalaureate degree, which is the minimum requirement for teaching nursing in Alberta, concerns are still being expressed by writers about the quality of nursing education in general (Davis & Williams, 1985, p. 20; Jacobsen, 1966, p. 218; O'Shea & Parsons, 1979, p. 411; Zimmerman & Waltman, 1986, p. 31). Nurse educators themselves express frustration in fulfilling the multitudes of expectations and feel inadequately prepared (Bauder, 1982, pp. 35-47; Huckaby, 1986, pp. 61-67; Mauksch, 1980, pp. 49-56; Wood & Matthewman, 1988, p. 131).

One reason for this feeling of inadequacy is that preservice education for adult educators in general has been deteriorating over the past few years (Haughey, 1987, pp. 13-15), and the baccalaureate degree does not allow for specialization. This means that nurse educators have to learn by trial and error or to model the behaviors they learned from their instructors. There is an assumption that subject matter expertise

is adequate for teaching in any postsecondary institution; however, Dubin and Taveggia (1968) found that subject matter expertise was not enough. In their studies of 56 college and university teaching programs, they found that a clear understanding of the learner characteristics and a sound knowledge of teaching strategies were crucial for effective teacher behaviors. Elsdon (1982, p. 82) and Knowles (1970, p. 160) agreed that educators' professional needs are intimately tied to their students' characteristics, expectations, and needs and should be examined closely when programs are being planned for educators. Therefore, "depending on their instructional roles . . . they may require certain abilities, skills, knowledge and attitudes to enable them to carry out their duties in an effective manner" (Dashcavich, 1988, p. 16).

Specialization in nursing education occurs at the Master's or doctoral level, but graduate education in nursing is relatively recent in Canada, leading to a "dearth of leaders and educators with advanced preparation" (Shantz, 1985, pp. 31-32). The first doctoral nursing program at the University of Alberta was approved in 1989.

de Tornyay (1989) asked the question, "Who will teach the future nurses?" She referred to the

> unsettling news that nurses completing their doctorates prefer positions not requiring them to teach. . . . However, because the majority of nurses holding a doctorate are employed in schools of nursing, should we not be preparing these future faculty members for the role they will be expected to assume? . . . Today, the teacher of nursing enters an academic career without the prerequisite trial of competence. Not only are teaching skills not developed, but as Zebelman and Olswang (1989) documented, the graduate of the doctoral programs becomes disinterested in a faculty position that will require substantial teaching efforts. . . . This is because the current environment of graduate nursing schools discourages students from seeking a teaching position. It is understandable and commendable that the new doctoral holder wishes to continue to

> be a researcher given the emphasis on nursing research in the doctoral program, but who will teach the future nurses? (p. 52)

In examining the impact of doctoral programs on nursing education, Brodie (1986) contended that graduate nursing programs emphasized research, while teaching is afforded little attention (pp. 350-357). Her concerns were echoed by Anderson, Roth, and Palmer (1985), who suggested that if the nursing profession wants to meet the need for qualified nurse educators, then doctoral programs should stress both the researcher's and the educator's roles in their programs (pp. 23-33).

The concerns expressed by researchers and educators in the United States are similar to ones in Canada. Published survey results on university programs for registered nurses in Canada indicated that of the seven faculties of nursing which offer graduate level programs, four are in clinical specialization, one in either teaching or administration, and two did not specify any area of specialization (Boch, 1980, pp. 36-39). This reveals that very little of a systematic nature has been accomplished within nursing education to prepare nurse educators for their instructional roles.

Another factor which has surfaced over the past decade and which has become an important component in the professional development of nurse educators is cultural diversity. In the United States, cultural diversity in nursing has reached national importance, as reflected in a new subfield of study in nursing called transcultural nursing. This field of study compares and applies the health care practices of different cultures (Leininger, 1978, pp. 7-30; McCloskey, 1985, p. 926; Morley, 1981). Canada is a multicultural country, and cultural and

ethnic problems in education parallel those of its neighbor, the United States.

> Although ethnicity and cultural diversity are not new concepts to nursing . . . there are many inaccuracies in the ideas of the general public about ethnic groups. It is essential to give nurses in practice and student nurses an opportunity to hear more realistic views about the various ethnic and cultural groups with which they will be working. Inservice educators and the nursing curriculum are two means to achieve this. (Branch, cited in McCloskey, p. 935)

There are some significant trends in today's student population. Students come to the teaching-learning environment with varied needs, goals, and personal experiences; they are also generally older than previous student groups. Nursing educators are required to be knowledgeable about adult learner characteristics and to be able to select teaching strategies to meet those diverse needs. Nursing education therefore must be prepared to devote considerable time and effort to ensuring that programs adequately prepare their graduates who are now older to be "well informed and highly skilled" in the use of information available to them and to be able to meet society's demands of them (Aydelotte, 1987, p. 114).

Finally, today's economic realities cannot be ignored--education costs money. The funding of nursing education to a large extent depends on societal needs and demands. Governments to a certain extent depend on their constituents to verify that certain needs exist before they will consider addressing them. Nurse educators, therefore, must improve their image and profile in society so that their professional development needs can be perceived as important and necessary.

Summary

The literature suggests that nurse educators' roles are complex and that graduate nursing programs deemphasize teaching and promote research, leading to a need for more qualified faculty with teaching preparation in schools of nursing. Some authors felt that such education should be tailored to the needs, expectations, and characteristics of the learners. There is general agreement in the literature that nurse educators require further preparation for their roles in the form of professional development activities. This information adds justification for this study, which looked at the perceived need for professional development of diploma nurse educators in Alberta.

The literature review also indicated that all adult educators have some basic needs associated with the seven knowledge and skill areas identified in the study. Such information was important because it confirmed that the items in the questionnaire were valid and would be able to identify the extent to which diploma nurse educators require professional development. Reaching conclusions about diploma nurse educators' professional development needs was also made easier due to information obtained from the literature review.

Chapter 3

Research Methodology and Procedures

This study was designed to obtain the opinions of diploma nurse educators about their perceived professional development needs in seven specified knowledge and skill areas and to relate these needs to personal characteristics. In this chapter the methodology and procedures used in the study as well as the rationale on which these are based are described.

Questionnaire Development

Since the study was descriptive and exploratory in nature, the survey method was considered to be an appropriate methodological approach. Burns and Grove (1987, pp. 250-251) suggest that this is the best method for collecting data about an identified group regarding their current and desired situation.

Questionnaire development was based on the components of the conceptual model used in the study, as well as on information obtained from the literature on professional development needs. Similar instruments utilized in educational studies conducted by Konrad (1982), Chapman (1987), and Weleschuk (1977) provided ideas for identification of items and for formatting of the questionnaire. The researcher, who has taught in two diploma nursing schools in Alberta for the past six years, was also able to generate items based on her knowledge of nursing and the nurse educator's role.

The initial draft of the questionnaire for this study was divided into three sections. Section 1 asked about personal and professional

data and included eight variables: age, level of education, teaching experience in nursing, type of present employment, area of major teaching responsibility, size of school, other nursing service responsibilities, and type of nursing program. These variables represent basic information about diploma nurse educators and the institutions in which they work. This background information was deemed important in order to help the researcher explore relationships between the demographic characteristics and the perceived perceptions regarding professional development in the seven specified knowledge and skill areas.

The purpose of Section 2 was to ascertain the need for professional development in seven general knowledge and skill areas of diploma nurse educators' responsibility. These include the school of nursing, the adult learner, classroom instruction, evaluation of clinical practice and classroom theory, the school's curriculum, teaching strategies, and interpersonal relationships (the student-teacher interactions and personal/professional development). Additional space was provided under each general heading for participants to identify any other professional development needs and current and desired level of performance.

The responses for "current" and "desired" levels were rated on a five-point Likert scale, ranging from "1", indicating little or no knowledge/skill in the specified areas, to "5", indicating very high knowledge and skills in the areas specified. The purpose of the "current" level scale was to obtain information regarding respondents' perceptions of their present knowledge and skills in the seven specified areas identified in the instrument, while the "desired" level scale asked the respondents to indicate where they would like to be in terms of their performance relating to specific aspects of the seven knowledge and skill

areas. In other words, the scales asked respondents to rate their current performance and level of knowledge and skills and then to decide what desired level of performance, knowledge, and skills would be more appropriate for them.

Space for "other" comments was provided at the end of each section. This was done to give respondents the opportunity to add more information or questions not addressed or to make specific comments that would clarify their choices.

Section 3 consisted of three open-ended questions, namely:

1. In what areas of your responsibilities do you feel a particular desire for further professional development?
2. What are your future plans for professional development? and
3. In what way(s), if any, is Entry to Practice (EP) 2000 influencing your professional development?

Entry to Practice refers to the resolution accepted by the Alberta Association of Nurses (1984) and the Canadian Nurses' Association (1986) that the "minimum entry to nursing practice by the year 2000 must be a baccalaureate degree." This section gave respondents an opportunity to state their professional development needs, indicate their plans for meeting those needs, and identify any influence the higher educational requirements for beginning nurses by the year 2000 may be having on their professional development.

The original instrument was pilot tested in May, 1988, with five nurse educators employed at the Alberta Hospital School of Nursing, Edmonton. In order to obtain participants for the pilot study, a request was made by telephone with a follow-up letter to the Director of the Alberta Hospital School of Nursing. She was informed about the nature of

the proposed research and requested to supply names of interested volunteers. Five nurse educators volunteered to participate in this phase of the study.

The researcher met with the volunteers at the Alberta Hospital School of Nursing in May, 1988. The researcher explained to the participants that the purposes of the pilot study were to (a) enable the researcher to assess the appropriateness and practicality of the instrument, and (b) help the researcher identify areas for further refinement in the instrument. Participants were then asked to complete the questionnaire, paying special attention to clarity of instructions, content and clarity of items, time required to complete the questionnaire, and suggestions for adding or deleting items.

Comments and suggestions regarding content were noted, and questions were modified in accordance with suggestions received. Modifications and refinements to the questionnaire on the basis of the pilot study involved rewording two questions for clarity and adding two new ones. The final instrument (Appendix A) reflected the adjustments made based on the results of the pilot test.

Sample

The sample for the study comprised all full-time, part-time, and casual nurse educators in all four hospital-based nursing preparation programs and five out of seven diploma college programs in Alberta. One college did not participate because the Director of Nursing stated that its members were suffering from "research fatigue." The other non-participating college failed to distribute the questionnaires to its faculty members within the specified time period.

Permission to conduct the research project was obtained by contacting each School of Nursing Director by telephone and by follow-up letter. In these two sources of communication, the researcher explained the nature of the proposed research and sought permission to have each Director of Nursing distribute the questionnaire to each nurse educator in each school. Permission was granted. One hundred and eighty-nine questionnaires were distributed to nurse educators in July, 1988.

Table 3.1

Frequency and Percentage Return of Questionnaires by Type of Program

Program	Number of questionnaires distributed	Number of questionnaires returned	Average Percentage
Hospital	111	99	89.19
College	78	70	89.74
Total	189	169	89.46

A covering letter explaining the project, assuring anonymity, and seeking voluntary participation in the study was included with each questionnaire. A self-addressed, stamped envelope was enclosed for return of the questionnaire. Copies of correspondence are included in Appendix B. By the end of August, 1988, a total of 169 questionnaires were received, a return of 89.46%. Table 3.1 outlines the distribution and percentage of the return rates of the questionnaires. However, 25 nurse educators from two schools of nursing did not participate, so this sample represented 78.97% of all nurse educators teaching in diploma schools in Alberta.

Methods of Data Analysis

In August, 1988, the data from the questionnaires were coded and transferred to computer cards for analysis after being checked visually by the researcher to ensure that they were correctly completed.

The analysis conducted yielded percentage and frequency distributions of the (a) respondent's age, level of education, teaching experience in nursing, type of present employment, area of major teaching responsibility, size of school, responsibilities in nursing service, and type of program; and (b) perceptions regarding current and desired level of performance in the seven specified knowledge and skill areas of the school of nursing, the adult learner, classroom instruction, evaluation of clinical practice and classroom theory, the school's curriculum, teaching strategies, and interpersonal--student-teacher interactions and personal/professional development. Tables were developed from the frequency and percentage distributions. Sometimes it was necessary to collapse the data obtained from the questionnaires before constructing the tables for easier reporting.

Discrepancy scores, that is, the desired level of performance minus the current level of performance, were calculated for all items in Section II to indicate the degree of perceived need for professional development. T-tests were computed to determine whether or not there were statistically significant differences among respondents in relation to perceived need for professional development when categorized by age, level of education, teaching experience in nursing, type of employment, area of major responsibility, size of school, and type of program.

The data from the open-ended questionnaire items was analyzed using principles of content analysis. "Content analysis is a research

technique for the objective, systematic, and quantitative description of the manifest content of communication" (Borg & Gall, 1983, p. 550). Content analysis comprises several categories, one of which is the subject matter category. In this category data are arranged according to themes which are considered to be the essential component. The themes may be represented by a single word or symbols. This analysis process involved grouping the responses regarding the three open-ended questions in Section 3: (1) in which areas nurse educators perceived a desire for further professional development, (2) what they plan to do in order to improve in those particular areas, and (3) in what way(s) the Entry to Practice (EP) 2000 position was influencing their desire to pursue professional development activities. Discussion is presented in Chapter 6. Inferences based on the data were made where applicable. Frequency counts were also made regarding the respondents' comments.

Summary

This descriptive, exploratory study used the survey method (questionnaire) to collect data on the perceived professional development needs of diploma nurse educators. The sample came from the target population of nurse educators who taught full-time, part-time, or casual in 9 of the 11 college- or hospital-based schools of nursing in Alberta. The overall response rate to the questionnaire was 89.46%.

The SPSSX program was used to process the data from the questionnaires. Percentage and frequency counts were performed. Discrepancy scores and t-tests were used to determine interrelationships among responses. The open-ended questions yielded information which was

compared with the literature and data from the questionnaires, and inferences were made where applicable.

Chapter 4

Demographic Profile of Alberta Diploma Nurse Educators

This chapter presents findings relating to a profile of diploma nurse educators based on the personal and professional data. These characteristics included age, level of education, teaching experience, type of present employment, area of major responsibility, size of school, nursing service responsibilities, and type of nursing program.

Age

Data on the age of the respondents is presented in Table 4.1. The table shows that 68% of Alberta's diploma nurse educators were between 31

Table 4.1

Age Characteristics of Respondents

Age	Frequency	Percentage
21-25	7	4.1
26-30	14	8.3
31-35	41	24.3
36-40	41	24.3
41-45	33	19.5
46-50	17	10.1
51-55	11	6.5
Over 55	5	3.0
Total	169	100.0

and 45 years of age. Only 12% were under 30 years of age, while 10% were between 46 and 50 years of age. About 6.5% were between 51 and 55 years of age, while only 3% were over 55 years of age.

Level of Education

When respondents were grouped according to the highest level of educational preparation (Table 4.2), the data revealed that only two nurse educators had R.N. diplomas plus some other qualifications, while 74% possessed a baccalaureate degree, or baccalaureate degree plus some other qualifications. Just over 23% of respondents held a Master's degree, while only three people reported having a Master's degree plus some other qualifications. The other three respondents listed under

Table 4.2

Frequency and Percentage Distributions of Respondents by Level of Education

Highest level of education	Frequency	Percentage
Doctorate	3	1.8
Master's	36	21.3
Master's plus other	3	1.8
Baccalaureate	87	51.5
Baccalaureate plus other	38	22.5
R.N. diploma	1	0.6
R.N. plus other	1	0.6
Total	169	100.0

"other" indicated that they had doctoral degrees. Of the 39 respondents who had Masters' degrees, 28 had a Master's in Education, 7 in Nursing, 2 in Science, 1 in Arts, and 1 in Community Health and Anthropology.

Thirty-eight respondents with baccalaureate degrees indicated they were completing courses towards a Master's degree in Education, the most commonly reported major being adult education. Seven baccalaureate diploma nurse educators were completing courses towards a Master's degree in Nursing, while one person was pursuing a Master's degree in Business.

Seventeen of the total respondents listed certificates or diplomas in adult education, midwifery, neonatal intensive care, extended care, coronary care, holistic care, and instructional strategies as their other qualifications.

Teaching Experience in Nursing

The frequency and percentage distributions of the respondents by years of total teaching experience in nursing are reported in Table 4.3. As indicated in the table, only 4.2% of Alberta's diploma nurse educators had less than one year's teaching experience in nursing; 42.3% had between four and nine years of teaching experience in nursing. Approximately one quarter of the nurse educators had between 10 and 15 years of teaching experience in nursing, while 7.7% had 16 to 18 years. Over 6.5% of respondents had taught in nursing for more than 19 years.

Type of Employment

As indicated in Table 4.4, the majority of respondents (89.9%) were employed full-time. Only 7.7% of Alberta's diploma nurse educators were working part-time, while 1.8% were employed on a casual basis.

Table 4.3

Distributions of Respondents According to Total Years of Teaching Experience in Nursing

Total teaching experience in nursing	Frequency	Percentage
<1 year	7	4.2
1 to 3 years	25	14.9
4 to 6 years	41	24.4
7 to 9 years	30	17.9
10 to 12 years	23	13.7
13 to 15 years	18	10.7
16 to 18 years	13	7.7
>19 years	11	6.5
Total	169	100.0

Table 4.4

Percentage Distributions of Respondents According to Type of Present Employment

Type of present employment	Frequency	Percentage
Full-time	152	89.9
Part-time	13	7.7
Casual	3	1.8
Not reported	1	.6
Total	169	100.0

Area of Major Teaching Responsibility

Table 4.5 summarizes responses of major teaching responsibility as reported in this study. More than half (55%) of the diploma nurse educators worked equally in the classroom and clinical settings, while 31.4% taught only in the clinical area. The next major area of responsibility was in administration (6.5%), while other responsibilities such as staff orientation and computer resource personnel were the two frequently mentioned "other" areas of responsibility, comprising 4.7%. Classroom and laboratory instruction comprised only 2.4% when combined.

Table 4.5

Distributions of Respondents According to Major Area of Teaching Responsibility

Major area of teaching responsibility	Frequency	Percentage
Classroom instruction	3	1.8
Clinical instruction	53	31.4
Approximately equal classroom and clinical responsibilties	93	55.0
Laboratory instruction only	1	0.6
Administration	11	6.5
Other	8	4.7
Total	169	100.0

Size of School

Table 4.6 reveals that 3.6% of the respondents came from a school with fewer than 10 faculty members, while schools with 10 to 19 members include 22.5% of respondents. Approximately 21.3% of the respondents were in schools with 20 to 29 faculty, and 18.9% were in schools with 30 to 39 faculty members. Schools with 40 to 49 members accounted for nearly one third of the sample (29.6%). By way of contrast, only 4.1% came from schools with 50 or more faculty members. Generally, the college schools of nursing were smaller in size, ranging from 10 to 29 faculty members, while the number of faculty members from hospital-based schools ranged from 20 to more than 50 members.

Table 4.6

Frequency and Percentage Distributions of Respondents According to Size of Nursing School

Size of school	Frequency	Percentage
<10	6	3.6
10 to 19	38	22.5
20 to 29	36	21.3
30 to 39	32	18.9
40 to 49	50	29.6
>50	7	4.1
Total	169	100.0

Type of Program: Hospital or College

Table 4.7 revealed that the majority of respondents (58.6%) were from hospital-based diploma schools of nursing, while 41.4% were employed in college-based diploma nursing programs.

Table 4.7

Frequency Distributions of Respondents by Type of Program

Program	Frequency	Percentage
College	70	41.4
Hospital	99	58.6
Total	169	100.0

Responsibilities in Nursing Service Other than Teaching

When asked about responsibilities other than teaching, of the total respondents only 8.28% indicated that they had responsibilities in nursing service other than their regular teaching responsibilities. Twelve of the respondents came from hospital-based schools of nursing, while only two came from college-based nursing programs. This distribution is outlined in Table 4.8. The majority of these nurse educators worked in their specialty areas and on hospital committees.

Table 4.8

Frequency and Percentage Distributions of Nurse Educators with Responsibilities in Nursing Service Other than Teaching

Program	Frequency	Percentage
College	2	1.18
Hospital	12	7.10
Total	14	8.28

Summary

This chapter presented a profile of the respondents according to selected characteristics. There was variation among respondents with clustering in certain categories.

The average age of diploma nurse educators was 31 to 45 years; more than 50% had a baccalaureate degree as their highest level of education. Ninety percent of respondents worked full-time with equal classroom and clinical responsibilities. They had between four and nine years of teaching experience in nursing. Hospital-based diploma nurse educators were more likely than college-based nurse educators to have a second set of responsibilities in nursing service in addition to their regular teaching responsibilities.

Chapter 5

Analysis of Professional Development Needs of Nurse Educators

The results of the data analysis to determine the professional development needs of diploma nurse educators are reported in this chapter. A comparison of current level with desired level performance means indicated a general need for professional development. In order to identify the knowledge/skill items which were perceived as having the highest need for professional development, the difference between the desired and current mean scores was calculated. The difference between the two means comprises a discrepancy score. The larger the discrepancy score, the greater the perceived need for professional development.

Results are presented in 10 major sections. The first eight focus, in turn, on each of the knowledge/skill areas: school of nursing, adult learner, classroom instruction, evaluation, school's curriculum, teaching strategies, and interpersonal interactions. In each section is presented a comparison of the current and desired levels of performance as reported by the respondents. Results of analyses exploring differences in discrepancy scores (or degree of need) between categories of respondents are also presented in each section. Specifically, significant differences in mean discrepancy scores as determined through t-tests are reported for categories of respondents based on age, level of education, and teaching experience.

The ninth section contains a report on results of analyses of differences in discrepancy scores between categories of respondents based on program-related variables such as type of program and size of school. In general, few differences were statistically significant. The chapter

concludes with an overview of the relative need for professional development in the broad areas as well as on specific items.

The School of Nursing

A comparison of the desired and current levels of development on knowledge and skills relating to the School of Nursing is reported from highest to lowest scores, as shown in Table 5.1. Information presented indicates that diploma nurse educators are generally most knowledgeable about their roles, their expected involvement in committees, conditions of employment, and philosophy of the institution in which they are employed. As a result of this knowledge, these four items had the highest current mean scores and the lowest discrepancy scores. In other words, the need for knowledge/skill in these four areas was minimal as reported by participants.

On the other hand, nurse educators desire a high level of knowledge and skills relating to future plans for their School of Nursing, understanding the effects of political and economic factors in nursing education, the effects of social change in nursing, and what community services and human resources are available to them. As shown in Table 5.1, the highest discrepancy score was related to future plans for the School of Nursing, while the lowest score was related to expected committee involvement in the schools.

Age

Analysis of knowledge and skills items relating to the School of Nursing by age of nurse educators indicated that there were statistically significant differences in mean discrepancy scores between respondents

Table 5.1

Comparison of Means of Desired and Current Levels of Development on Knowledge and Skills Relating to the School of Nursing

School of Nursing Knowledge/skill	Mean		
	Current	Desired	Difference
Knowledge about future plans for the School of Nursing	3.34	4.82	1.48
Knowledge of the effect of political and economic factors in nursing education	3.52	4.79	1.27
Knowledge of the effects of social change in nursing education	3.59	4.79	1.20
Knowledge about available community services and human resources to your school	3.56	4.69	1.13
Knowledge of the functions of administrative personnel	3.66	4.49	.83
Knowledge of career opportunities available to graduates of your school	3.89	4.62	.73
Knowledge of the nurse educator's role	4.24	4.89	.65
Knowledge of the philosophy of the School of Nursing	4.04	4.59	.55
Knowledge of conditions of employment	4.15	4.69	.54
Knowledge of your expected involvement in committees	4.23	4.63	.40

who were 40 years of age or younger and those 41 years or older on 8 of the 10 items shown in Table 5.2. In all instances, the younger nurse educators perceived a greater need for professional development than did those respondents 41 years of age or older in that they (the younger) had significantly higher discrepancy scores. The table reveals that the

Table 5.2

Results of Analysis of Differences in Discrepancy Scores Relating to the School of Nursing by Age of Nurse Educators

School of Nursing Knowledge/skill	Age: Group 1 N = 103 40 or younger Mean	Age: Group 2 N = 66 41 or older Mean	t-value
Knowledge of the philosophy of the School of Nursing	.67	.38	2.27*
Knowledge of the conditions of employment	.64	.36	2.41*
Knowledge of the functions of administrative personnel	1.04	.52	3.79**
Knowledge of the nurse educator's role	.84	.33	4.58**
Knowledge of your expected involvement in committees	.48	.29	1.47
Knowledge of the effects of social change in nursing education	1.35	.95	2.81**
Knowledge of the effect of political and economic factors in nursing education	1.44	1.00	3.12**
Knowledge about available community services and human resources to your school	1.29	.86	3.16**
Knowledge of career opportunities available to graduates of your school	.80	.62	1.42
Knowledge about future plans for the School of Nursing	1.66	1.20	2.51*

* Significant at <0.05
** Significant at <0.01

younger respondents reported a greater need for knowledge about the nurse educator's role; the effects of political, economic, and social change in nursing education; a greater understanding of available community services and human resources; and functions of administrative personnel. To a lesser extent they would like to be more knowledgeable about the School of Nursing philosophy, conditions of employment, and future plans for their schools. The two age groups were not significantly different with respect to their knowledge about expected committee involvement and career opportunities available to graduates of the Schools of Nursing.

Level of Education

Discrepancy scores of two groups of respondents based on highest level of education were analysed using t-tests. The groups were as follows: Group 1 - nurse educators with a R.N. Diploma plus other qualifications, or Baccalaureate degree; Group 2 - those educators having a Baccalaureate degree plus other qualifications, or Master's degree, or Master's degree plus other qualifications.

According to the results of the analysis, professional development needs of Group 1 respondents were different from those of Group 2 respondents. These differences, as outlined in Table 5.3, indicated that the perceived need for professional development in regard to knowledge about the School of Nursing was higher for the less qualified respondents than for the more qualified ones. The differences in perceived needs that were statistically significant related to knowledge of the nurse educator's role, the effect of political and economic factors in nursing education, conditions of employment, available community services and human resources, expected involvement in committees, and the effects of

Table 5.3

Results of Analysis of Differences in Discrepancy Scores Relating to the School of Nursing by Level of Education of Nurse Educators

School of Nursing Knowledge/skill	Level of education: Group 1 N = 89 RN Diploma & other Baccalaureate Mean	Group 2 N = 77 Baccalaureate & other Master's/ Master's & other Mean	t-Value
Knowledge of the philosophy of the School of Nursing	.63	.49	1.06
Knowledge of conditions of employment	.66	.40	2.28*
Knowledge of the functions of administrative personnel	.98	.70	1.87
Knowledge of the nurse educator's role	.82	.47	2.87**
Knowledge of your expected involvement in committees	.53	.27	2.11*
Knowledge of the effects of social change in nursing education	1.38	1.03	2.58*
Knowledge of the effect of political and economic factors in nursing education	1.46	1.09	2.68**
Knowledge about available community services and human resources to your school	1.28	.97	2.27*
Knowledge of career opportunities available to graduates of your school	.76	.70	.51
Knowledge about future plans for the School of Nursing	1.45	1.57	.66

* Significant at <0.05
** Significant at <0.01

social change in nursing education. The two groups were not significantly different on the other items relating to the School of Nursing.

Teaching Experience in Nursing

To determine differences in regard to teaching experience, the respondents were placed into two groups according to the total number of years of teaching experience in nursing. The groups were as follows: Group 1 - six years or less, and Group 2 - seven years or more.

According to the results presented in Table 5.4, there were significant differences in perceptions of need for professional development between the groups on 8 out of the 10 items related to the School of Nursing. The table reveals that respondents with six or fewer years of total teaching experience in nursing perceived a greater need for knowledge about functions of administrative personnel, the nurse educator's role, expected involvement in committees, effects of social change in nursing education, effect of political and economic factors in nursing education, and available community services and human resources to the school of nursing than did respondents with seven or more years' teaching experience. Increased knowledge of the philosophy and future plans for the School of Nursing were also more important to nurse educators with six or fewer years of teaching experience. The other two items were not statistically significant.

The Adult Learner

Results of comparing the desired and current levels of development on knowledge and skills relating to the adult learner indicated that

Table 5.4

Results of Analysis of Differences in Discrepancy Scores Relating to the School of Nursing by Years of Teaching Experience of Nurse Educators

School of Nursing Knowledge/skill	Teaching experience: Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
Knowledge of the philosophy of the School of Nursing	.84	.34	3.91*
Knowledge of conditions of employment	.62	.46	1.33
Knowledge of the functions of administrative personnel	1.12	.61	3.56**
Knowledge of the nurse educator's role	1.01	.36	5.45**
Knowledge of your expected involvement in committees	.62	.24	2.94**
Knowledge of the effects of social change in nursing education	1.41	1.01	2.92**
Knowledge of the effect of political and economic factors in nursing education	1.48	1.08	2.87**
Knowledge about available community services and human resources to your school	1.37	.93	3.33**
Knowledge of career opportunities available to graduates of your school	.84	.64	1.59
Knowledge about future plans for the School of Nursing	1.73	1.31	2.30*

* Significant at <0.05
** Significant at <0.01

nurse educators are currently operating at a generally high level of knowledge and skills. The lowest-rated categories of current level of performance relate to knowledge of the theories of teaching, the nature of adult learning, the adult self-concept, and the adult learner characteristics. The data in Table 5.5 show that these four items had the highest discrepancy scores, indicating a high perceived need for professional development in these areas. Conversely, knowledge of the adult social roles and responsibilities, adult life-cycle, and the adult

Table 5.5

Comparison of Means of Desired and Current Levels of Development on Knowledge and Skills Relating to the Adult Learner

	Mean		
Adult learner Knowledge/skill	Current level	Desired level	Difference
Knowledge of the theories of teaching	3.38	4.80	1.42
Knowledge of the nature of adult learning	3.66	4.80	1.14
Knowledge of adult self-concept	3.66	4.78	1.12
Knowledge of the adult learner characteristics	3.79	4.79	1.00
Knowledge of adult developmental tasks	3.83	4.72	.89
Knowledge of the life-cycle of adults	3.86	4.66	.80
Knowledge of the adult social roles and responsibilities	3.94	4.62	.68

developmental tasks had relatively higher current performance means and the lowest discrepancy scores, indicating a lesser perceived need for professional development in regard to these items.

Age

Results of analysis of discrepancy scores relating to the adult learner by age of nurse educators indicated that respondents who were 40 years of age or younger differed significantly in their perceptions of the need for professional development regarding specific aspects. On five of the seven items shown in Table 5.6, the mean scores for the younger age group were significantly higher than those for the older age group, which indicates a higher need for professional development by the younger age group.

The table shows that the younger respondents desire greater knowledge and skills relating to theories of teaching, the nature of adult learning, the adult self-concept, the adult learner characteristics, and knowledge of adult developmental tasks than do respondents 41 years of age or older. The two groups were not significantly different in regard to their perceptions of their knowledge relating to the life-cycle of adults and the adult social roles and responsibilities.

Level of Education

For purposes of testing for differences in professional development needs by level of highest education, respondents were placed into two groups: Group 1 - R.N. Diploma plus other qualifications, or Baccalaureate degree; and Group 2 - Baccalaureate degree plus other

Table 5.6

Results of Analysis of Differences in Discrepancy Scores Relating to the Adult Learner by Age of Nurse Educators

Adult learner Knowledge/skill	Teaching experience: Group 1 N = 103 40 or younger Mean	Teaching experience: Group 2 N = 66 41 or older Mean	t-Value
Knowledge of the life-cycle of adults	.87	.68	1.55
Knowledge of the nature of adult learning	1.28	.92	2.52*
Knowledge of adult self-concept	1.27	.88	2.85**
Knowledge of the theories of teaching	1.58	1.15	3.10**
Knowledge of adult developmental tasks	1.04	.64	3.49**
Knowledge of the adult social roles and responsibilities	.75	.58	1.49
Knowledge of the adult learner characteristics	1.15	.77	3.08**

* Significant at <0.05.
** Significant at <0.01.

qualifications, or Master's degree, or Master's degree and other qualifications.

As is indicated in Table 5.7, Group 1 respondents expressed a higher need in general than did Group 2 in that their discrepancy score means on all of the seven items were higher. Differences between six of the seven means were statistically significant. These items related to knowledge

Table 5.7

Results of Analysis of Differences in Discrepancy Scores Relating to the Adult Learner by Level of Education of Nurse Educators

Adult learner Knowledge/skill	Level of education: Group 1 N = 89 RN Diploma & other Baccalaureate Mean	Group 2 N = 77 Baccalaureate & other Master's/ Master's & other Mean	t-Value
Knowledge of the life-cycle of adults	.92	.68	2.01*
Knowledge of the nature of adult learning	1.31	.95	2.60*
Knowledge of adult self-concept	1.33	.90	3.17**
Knowledge of the theories of teaching	1.62	1.20	2.99**
Knowledge of adult developmental tasks	1.04	.70	2.98**
Knowledge of the adult social roles and responsibilities	.76	.60	1.46
Knowledge of the adult learner characteristics	1.15	.84	2.49*

* Significant at <0.05
** Significant at <0.01

of the theories of teaching, the adult developmental tasks, adult self-concept, the life-cycle of adults, nature of adult learning, and the adult learner characteristics. The degree of perceived need for professional development in relation to knowledge and skills about the adult learner was higher for the less qualified than for the more

qualified respondents. The groups did not differ on the need for additional knowledge and skills about the adult social roles and responsibilities.

Teaching Experience

Respondents were grouped according to total years of teaching experience in nursing: Group 1 - six years or less, and Group 2 - seven years or more. Results of t-tests presented in Table 5.8 indicate that

Table 5.8

Results of Analysis of Differences in Discrepancy Scores Relating to the Adult Learner by Years of Teaching Experience of Nurse Educators

Adult learner Knowledge/skill	Teaching experience: Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
Knowledge of the life-cycle of adults	.99	.66	2.67*
Knowledge of the nature of adult learning	1.45	.89	4.09*
Knowledge of adult self-concept	1.37	.93	3.28*
Knowledge of the theories of teaching	1.74	1.16	4.35*
Knowledge of adult developmental tasks	1.05	.74	2.77*
Knowledge of the adult social roles and responsibilities	.81	.59	1.93
Knowledge of the adult learner characteristics	1.23	.82	3.46*

* Significant at <0.01.

respondents with six or fewer years of teaching experience in nursing had significantly higher mean scores on six of seven items relating to knowledge and skills of the adult learner than did respondents with seven years or more teaching experience. There were significant differences in the perceptions relating to knowledge and skills of the life-cycle of adults, the nature of adult learning, the adult self-concept, the theories of teaching, adult developmental tasks, and characteristics of the adult learner. As in previous analyses, the degree of perceived need for professional development was greater among respondents having six or fewer years of teaching experience than among those having seven years or more. There was no significant difference on need for professional development in knowledge and skills relating to the adult social roles and responsibilities.

Classroom Instruction

Comparison of means of desired and current levels of development on knowledge and skills relating to classroom instruction shown in Table 5.9 indicates that current levels of knowledge/skills were moderate to high, but respondents would prefer their knowledge/skills to be at a higher level. The lowest-rated items on the current knowledge/skill scale were preparing independent study materials, developing appropriate strategies to motivate adult learners, helping students develop critical thinking abilities, promoting self-directed learning, using a variety of instructional materials, and selecting appropriate instructional materials. These items also had the highest discrepancy scores, ranging from 1.54-1.21, indicating the greatest perceived need for professional development. The items with the highest discrepancy scores were

Table 5.9

Comparison of Means of Desired and Current Levels of Development on Knowledge and Skills Relating to Classroom Instruction

Classroom instruction Knowledge/skill	Mean		
	Current level	Desired level	Difference
Preparing independent study materials	3.17	4.71	1.54
Developing appropriate strategies to motivate adult learners	3.35	4.89	1.54
Helping students develop critical thinking abilities	3.43	4.96	1.53
Promoting self-directed learning	3.45	4.90	1.45
Using a variety of instructional materials	3.63	4.88	1.25
Selecting appropriate instructional materials	3.64	4.85	1.21
Knowledge of a variety of instructional materials	3.82	4.91	1.09
Creating a favorable learning environment	3.80	4.88	1.08
Planning daily and long-term learning activities	3.73	4.81	1.08
Managing classroom activities	3.81	4.81	1.00
Using audio-visual equipment	3.74	4.74	1.00

preparing independent study materials, developing appropriate strategies to motivate adult learners, helping students develop critical thinking abilities, and promoting self-directed learning.

Age

Results of the analysis for two groups of respondents based on age revealed significant differences between the two groups. Table 5.10 shows that the younger age group had higher means on all items than did respondents who were older, indicating a greater perceived need for professional development in the area of classroom instruction. There was only one item on which the difference in discrepancy score means was not significant. Both groups had a similar need for development in regard to helping students develop critical thinking abilities. The items with the highest discrepancy scores in Table 5.9--preparing independent study materials, developing appropriate strategies to motivate adult learners, helping students develop critical thinking abilities, and promoting self-directed learning--also had the highest means for both groups, indicating that the degree of perceived need was highest with respect to these four items for both older and younger educators.

Level of Education

Results of analysis of discrepancy scores relating to classroom instruction by highest level of education are shown in Table 5.11. The differences in Table 5.11 indicate that the less qualified respondents had a greater perceived need than did those with higher qualifications. Differences between mean discrepancy scores were statistically significant on 9 of the 11 items.

Table 5.10

Results of Analysis of Differences in Discrepancy Scores Relating to Classroom Instruction by Age of Nurse Educators

Classroom instruction Knowledge/skill	Age: Group 1 N = 103 40 or younger Mean	Age: Group 2 N = 66 41 or older Mean	t-Value
Creating a favorable learning environment	1.19	.92	2.25*
Knowledge of a variety of instructional methods	1.24	.86	3.30**
Using a variety of instructional materials	1.37	1.05	2.35*
Selecting appropriate instructional materials	1.38	.92	3.85**
Managing classroom activities	1.12	.81	2.40*
Using audio-visual equipment	1.11	.83	1.99*
Planning daily and long-term learning activities	1.20	.88	2.60*
Preparing independent study materials	1.76	1.18	3.73**
Developing appropriate strategies to motivate adult learners	1.69	1.30	3.17**
Promoting self-directed learning	1.59	1.23	2.71**
Helping students develop critical thinking abilities	1.60	1.43	1.41

* Significant at <0.05.
** Significant at <0.01.

Table 5.11

Results of Analysis of Differences in Discrepancy Scores Relating to Classroom Instruction by Level of Education of Nurse Educators

Classroom instruction Knowledge/skill	Level of education: Group 1 N = 89 RN Diploma & other Baccalaureate Mean	Group 2 N = 77 Baccalaureate & other Master's/ Master's & other Mean	t-Value
Creating a favorable learning environment	1.27	.88	3.43**
Knowledge of a variety of instructional methods	1.30	.87	3.86**
Using a variety of instructional materials	1.38	1.09	2.29*
Selecting appropriate instructional materials	1.37	1.03	2.89**
Managing classroom activities	1.16	.83	2.82**
Using audio-visual equipment	1.02	.97	0.35
Planning daily and long-term learning activities	1.34	.79	4.76**
Preparing independent study materials	1.73	1.34	2.46*
Developing appropriate strategies to motivate adult learners	1.68	1.39	2.40*
Promoting self-directed learning	1.65	1.24	3.16**
Helping students develop critical thinking abilities	1.61	1.46	1.30

* Significant at <0.05.
** Significant at <0.01.

The four items with the highest means for both groups and, therefore, those with the greatest perceived need for professional development were the same as those on which there were differences between age groups. These items include preparing independent study materials, developing appropriate strategies to motivate adult learners, promoting self-directed learning, and helping students develop critical thinking abilities. All items reflected significant desire for improvement in knowledge/skill levels in relation to classroom instruction.

Teaching Experience

The determination of differences between respondents in respect to the knowledge/skill relating to classroom instruction by total years of teaching experience in nursing are shown in Table 5.12. Mean discrepancy scores of Group 1 with six or fewer years of teaching experience and Group 2 with seven years or more experience were significantly different from each other on all 11 items. In relation to all specific aspects of classroom instruction, the less experienced respondents had a greater perceived need for professional development than did their counterparts with more teaching experience. In general, all items were considered by the less experienced respondents as being important for professional development. The least desired areas for improvement in knowledge/skills were using audio-visual equipment and managing classroom activities, which had the lowest discrepancy scores and the highest current means.

Table 5.12

Results of Analysis of Differences in Discrepancy Scores Relating to Classroom Instruction by Years of Teaching Experience of Nurse Educators

Classroom instruction Knowledge/skill	Teaching experience		
	Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 94 7 or more yrs. Mean	t-Value
Creating a favorable learning environment	1.44	.81	5.93*
Knowledge of a variety of instructional methods	1.47	.81	6.19*
Using a variety of instructional materials	1.59	.98	5.09*
Selecting appropriate instructional materials	1.56	.93	5.70*
Managing classroom activities	1.34	.74	5.12*
Using audio-visual equipment	1.25	.80	3.36*
Planning daily and long-term learning activities	1.47	.76	6.34*
Preparing independent study materials	1.94	1.21	4.93*
Developing appropriate strategies to motivate adult learners	1.81	1.32	4.06*
Promoting self-directed learning	1.79	1.19	4.80*
Helping students develop critical thinking abilities	1.71	1.40	2.63*

* Significant at <0.01.

Evaluation

A comparison of means of desired and current levels of development on knowledge and skills relating to evaluation of clinical practice and classroom theory is presented in Table 5.13. Respondents tended to rate their performance on the current level scale as moderate to high. The highest current level means were on providing appropriate clinical learning experiences, recognizing students' clinical learning needs, evaluating return demonstration, and writing clinical evaluation reports.

The highest-rated items on the desired level scale were writing clinical evaluation reports, providing appropriate clinical learning experiences, recognizing students' clinical learning needs, and constructing examination test items.

The lowest-rated items on the current level scale were constructing examination test items, conducting oral quizzes, grading essay assignments, and writing clinical evaluation reports. These four items listed in order above also had the highest discrepancy scores, reflecting a greater perceived need for development in these areas.

Age

Analysis of discrepancy scores for knowledge/skills relating to evaluation by age of nurse educators are presented in Table 5.14. According to the results of the analysis, respondents 40 years of age and younger exhibited significantly higher means on 8 of 10 items than did those 41 years and older. Four items with the highest discrepancy scores (Table 5.13) and highest means for both groups consistently reflect a greater perceived need for improvement. These items in order of perceived need are as follows: constructing examination test items,

Table 5.13

Comparison of Means of Desired and Current Levels of Development on Knowledge and Skills Relating to Evaluation

Evaluation Knowledge/skill	Mean		
	Current level	Desired level	Difference
A. Clinical practice			
Writing clinical evaluation reports	3.77	4.83	1.06
Writing pertinent anecdotal notes	3.60	4.57	.97
Recognizing students' clinical learning needs	3.97	4.82	.85
Providing appropriate clinical learning experiences	4.01	4.83	.82
Maintaining students' skills checklists	3.61	4.16	.55
B. Classroom theory			
Constructing examination test items	3.29	4.75	1.46
Conducting oral quizzes	3.43	4.53	1.10
Grading essay assignments	3.54	4.60	1.06
Assessing students' nursing care seminar presentations	3.59	4.58	.98
Evaluating return demonstration	3.82	4.56	.74

Table 5.14

Results of Analysis of Differences in Discrepancy Scores Relating to Evaluation by Age of Nurse Educators

Evaluation Knowledge/skill	Age: Group 1 N = 103 40 or younger Mean	Age: Group 2 N = 65 41 or older Mean	t-Value
A. Clinical practice			
Writing pertinent anecdotal notes	1.00	.92	0.54
Maintaining students' skills checklists	.56	.52	0.30
Recognizing students' clinical learning needs	.98	.66	3.13**
Providing appropriate clinical learning experiences	.95	.63	3.16**
Writing clinical evaluation reports	1.24	.79	3.42**
B. Classroom theory			
Evaluating return demonstration	.84	.58	2.06*
Conducting oral quizzes	1.26	.86	2.88**
Grading essay assignments	1.21	.81	2.71**
Assessing students' nursing care seminar presentations	1.15	.75	2.97**
Constructing examination test items	1.75	1.28	3.12**

* Significant at <0.05.
** Significant at <0.01.

conducting oral quizzes, writing clinical evaluation reports, and grading essay assignments. The two age groups were not significantly different in degree of perceived need related to knowledge/skill about writing pertinent anecdotal records and maintaining students' skills checklists.

Level of Education

Discrepancy scores of two groups of the respondents based on highest level of education were examined in the analysis presented in Table 5.15. As with previous analyses related to level of education, the less qualified respondents generally indicated they had a greater perceived need for professional development than did the more qualified nurse educators. The same items on which there were differences relating to age were the ones on which there were differences by level of education. Six of the 10 items were significantly different in regard to the degree of perceived need by the two groups.

Teaching Experience

Respondents were categorized into two groups according to total years of teaching experience in nursing. Results of t-tests reported in Table 5.16 indicated that those respondents who were less qualified tended to express a greater need for improvement than did the more qualified ones on all 10 items relating to evaluation. The difference between mean discrepancy scores was significantly different on 8 of 10 items. The items were similar to those on which there were differences between age and education level groups.

Table 5.15

Results of Analysis of Differences in Discrepancy Scores Relating to Evaluation by Level of Education of Nurse Educators

Evaluation Knowledge/skill	Level of education: Group 1 N = 88 RN Diploma & other Baccalaureate Mean	Group 2 N = 76 Baccalaureate & other Master's/ Master's & other Mean	t-Value
A. Clinical practice			
Writing pertinent anecdotal notes	1.00	.95	0.37
Maintaining students' skills checklists	.65	.43	1.55
Recognizing students' clinical learning needs	.98	.72	2.56*
Providing appropriate clinical learning experiences	.94	.69	2.53*
Writing clinical evaluation reports	1.20	.93	2.03*
B. Classroom theory			
Evaluating return demonstration	.91	.55	2.92**
Conducting oral quizzes	1.18	1.03	1.10
Grading essay assignments	1.20	.91	2.61*
Assessing students' nursing care seminar presentations	1.12	.87	1.93
Constructing examination test items	1.81	1.32	3.26**

* Significant at <0.05.
** Significant at <0.01.

Table 5.16

Results of Analysis of Differences in Discrepancy Scores Relating to Evaluation by Years of Teaching Experience of Nurse Educators

Evaluation Knowledge/skill	Teaching experience: Group 1 N = 72 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
A. Clinical practice			
Writing pertinent anecdotal notes	1.10	.87	1.69
Maintaining students' skills checklists	.69	.43	1.87
Recognizing students' clinical learning needs	1.11	.66	4.68**
Providing appropriate clinical learning experiences	1.03	.66	3.77**
Writing clinical evaluation reports	1.33	.84	3.89**
B. Classroom theory			
Evaluating return demonstration	.96	.56	3.22**
Conducting oral quizzes	1.42	.87	4.03**
Grading essay assignments	1.28	.89	2.62*
Assessing students' nursing care seminar presentations	1.26	.79	3.69**
Constructing examination test items	2.00	1.24	5.28**

* Significant at <0.05.
** Significant at <0.01.

School's Curriculum

Comparison of means of desired and current levels of development on knowledge and skills relating to the school's curriculum in Table 5.17 revealed that respondents were performing at a moderate to high level on the current knowledge/skill scale. The lowest-rated items on the current level scale were planning and developing curriculum, revising the curriculum, evaluating the curriculum, and writing instructional objectives. These four items also had the largest discrepancy scores of the seven items.

Table 5.17

Comparison of Means of Desired and Current Levels of Development on Knowledge and Skills Relating to School's Curriculum

School's curriculum Knowledge/skill	Mean		
	Current level	Desired level	Difference
Planning and developing curriculum	3.10	4.70	1.60
Revising the curriculum	3.28	4.74	1.46
Evaluating the curriculum	3.41	4.75	1.34
Writing instructional objectives	3.49	4.69	1.20
Explaining the relevance of the curriculum to students	3.57	4.73	1.16
Evaluating clarity of instructional objectives	3.62	4.77	1.15
Implementing the curriculum	3.74	4.76	1.02

Implementing the curriculum and evaluating the clarity of instructional objectives were the items rated the highest in terms of current level of performance; they also had the lowest discrepancy scores. Evidently, these knowledge/skill areas are not that important for professional development when compared to other areas. The extent of perceived need on all items as indicated by the discrepancy scores in Table 5.17 was relatively high for all items.

Age

Results of analyses of discrepancy scores relating to the school's curriculum according to age of respondents are presented in Table 5.18. As in previous analyses, the younger respondents displayed a greater need for professional development than did their older counterparts. Differences in mean scores for all seven items in the school's curriculum category were statistically significant.

Level of Education

As for other areas of knowledge and skills, differences among respondents by highest level of education were explored. The results of the analysis in Table 5.19 indicated that the less qualified respondents had a greater perceived need for professional development on all items related to the school's curriculum than did the older ones. All items revealed statistically significant differences in perceptions of knowledge/skill levels according to level of education.

Table 5.18

Results of Analysis of Differences in Discrepancy Scores Relating to the School's Curriculum by Age of Nurse Educators

School's curriculum Knowledge/skill	Age: Group 1 N = 102 40 or younger Mean	Age: Group 2 N = 65 41 or older Mean	t-Value
Writing instructional objectives	1.36	.95	3.07*
Evaluating clarity of instructional objectives	1.34	.86	3.85*
Planning and developing curriculum	1.77	1.32	3.07*
Implementing the curriculum	1.20	.74	3.80*
Evaluating the curriculum	1.51	1.06	3.52*
Revising the curriculum	1.64	1.20	2.87*
Explaining the relevance of the curriculum to students	1.30	.92	2.82*

* Significant at <0.01.

Table 5.19

Results of Analysis of Differences in Discrepancy Scores Relating to the School's Curriculum by Level of Education of Nurse Educators

School's curriculum Knowledge/skill	Level of education: Group 1 N = 88 RN Diploma & other Baccalaureate Mean	Level of education: Group 2 N = 76 Baccalaureate & other Master's/ Master's & other Mean	t-Value
Writing instructional objectives	1.45	.95	4.01*
Evaluating clarity of instructional objectives	1.39	.93	3.68*
Planning and developing curriculum	1.84	1.36	3.40*
Implementing the curriculum	1.21	.83	3.15*
Evaluating the curriculum	1.52	1.16	2.79*
Revising the curriculum	1.68	1.25	2.89*
Explaining the relevance of the curriculum to students	1.34	.96	2.84*

* Significant at <0.01.

Teaching Experience

When respondents were grouped according to total teaching experience in nursing, as presented in Table 5.20, those with six or fewer years of teaching experience indicated that they had a higher degree of need for professional development than did those with seven years or more of

Table 5.20

Results of Analysis of Differences in Discrepancy Scores Relating to the School's Curriculum by Years of Teaching Experience of Nurse Educators

School's curriculum Knowledge/skill	Teaching experience: Group 1 N = 72 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
Writing instructional objectives	1.50	.98	4.55*
Evaluating clarity of instructional objectives	1.46	.93	4.37*
Planning and developing curriculum	1.96	1.33	4.49*
Implementing the curriculum	1.36	.76	5.17*
Evaluating the curriculum	1.64	1.11	4.27*
Revising the curriculum	1.75	1.25	3.34*
Explaining the relevance of the curriculum to students	1.42	.94	3.76*

* Significant at <0.05.

teaching experience. Differences between means on all items relating to knowledge and skills of the school's curriculum were statistically significant between the two groups based on years of teaching experience.

Teaching Strategies

The comparison of means of desired and current levels of development on knowledge and skills relating to teaching strategies, shown in

Table 5.21, indicated that respondents' current level of performance ranged from moderately "low" in educational games to "very high" in the use of case studies and computer assisted learning.

The items on the desired level scale with the highest mean ratings were programmed learning, team teaching, questioning, using educational games, and group discussions. Consequently, teaching strategies which included questioning, group discussions, and programmed learning had the lowest mean discrepancy scores.

Teaching strategies items listed in order of highest-ranked discrepancy scores are educational games, lecture, and simulation techniques. Two items had negative discrepancy scores; they were brainstorming and computer-assisted learning. Respondents indicated that their current level of performance on these two items was higher than the desired level, indicating satisfaction with current performance and no desire for further improvement in knowledge/skills.

Age

The results of analysis of discrepancy scores relating to knowledge and skills of teaching strategies by age of respondents, shown in Table 5.22, confirmed differences between Group 1 - age 40 years or younger, and Group 2 - 41 years of age or older. Respondents aged 40 years or younger had a higher perceived need for professional development with regard to teaching strategies than did respondents aged 41 years or older on 13 of 19 items. This analysis revealed that the greatest differences between the two groups in need for further improvement revolved around the use of teaching strategies such as lecture, nursing care conferences, panel presentations, programmed learning, and role

Table 5.21

Comparison of Means of Desired and Current Levels of Development on Knowledge and Skills Relating to Teaching Strategies

Teaching strategies Knowledge/skill	Mean		
	Current level	Desired level	Difference
Educational games	2.46	4.66	2.20
Lecture	2.81	4.39	1.58
Simulation techniques	2.82	4.33	1.51
Seminars	2.89	4.31	1.42
Guided practice	2.79	4.17	1.38
Demonstration	3.00	4.33	1.33
Nursing care conferences	2.83	3.98	1.15
Team teaching	3.68	4.78	1.10
Debate	3.49	4.57	1.08
Role playing	3.65	4.66	1.01
Buzz group	3.58	4.57	.99
Field trips	3.66	4.60	.94
Programmed learning	3.94	4.82	.88
Panel presentations	3.79	4.64	.85
Case studies	4.73	4.57	.84
Group discussion	3.98	4.66	.68
Questioning	4.14	4.78	.64
Computer-assisted learning	4.73	3.49	-.77
Brainstorming	3.58	3.49	-.91

Table 5.22

Results of Analysis of Differences in Discrepancy Scores Relating to Teaching Strategies by Age of Nurse Educators

Teaching strategies Knowledge/skill	Age: Group 1 N = 102 40 or younger Mean	Age: Group 2 N = 66 41 or older Mean	t-Value
Brainstorming	1.21	.88	2.21*
Buzz group	1.44	1.17	1.57
Computer assisted learning	2.25	2.11	.94
Case studies	1.02	.82	1.51
Debate	1.53	1.15	2.14*
Demonstration	.73	.59	1.07
Educational games	1.74	1.35	2.28*
Field trips	1.27	.99	1.65
Guided practice	.95	.68	2.24*
Group discussion	.94	.77	1.44
Lecture	.77	.42	3.28**
Nursing care conferences	1.17	.77	2.94**
Panel presentations	1.65	1.06	3.52**
Programmed learning	1.73	1.16	3.31**
Questioning	1.20	.92	2.19*
Role playing	1.34	.89	2.94**
Seminars	1.26	.89	2.48*

(table continues)

Table 5.22 (continued)

Teaching strategies Knowledge/skill	Age		t-Value
	Group 1 N = 102 40 or younger Mean	Group 2 N = 66 41 or older Mean	
Simulation techniques	1.55	1.20	2.19*
Team teaching	1.32	.92	2.45*

* Significant at <0.05.
** Significant at <0.01.

playing. To a lesser extent there were differences in knowledge/skills in relation to teaching strategies such as brainstorming, debate, educational games, guided practice, seminars, simulation techniques, questioning, and team teaching. Analysis of the other items did not reveal any significant differences between the two groups. Both age groups had a relatively high perceived need for professional development in computer-assisted learning.

Level of Education

Results of analysis of perceived need relating to teaching strategies based on highest level of education outlined in Table 5.23 revealed that respondents in Group 1 - R.N. Diploma plus other qualifications, or Baccalaureate degree, and Group 2 - Baccalaureate degree plus other qualifications, or Master's degree, or Master's degree and other qualifications, differ in their perceptions of desired professional development needs. Respondents with fewer qualifications

Table 5.23

Results of Analysis of Differences in Discrepancy Scores Relating to Teaching Strategies by Level of Education of Nurse Educators

Teaching strategies Knowledge/skill	Level of education: Group 1 N = 88 RN Diploma & other Baccalaureate Mean	Level of education: Group 2 N = 76 Baccalaureate & other Master's/ Master's & other Mean	t-Value
Brainstorming	1.25	.92	2.27*
Buzz group	1.58	1.08	2.95**
Computer assisted learning	2.32	2.08	1.54
Case studies	1.01	.87	1.08
Debate	1.63	1.12	2.92**
Demonstration	.81	.52	2.26*
Educational games	1.68	1.47	1.27
Field trips	1.30	1.01	1.53
Guided practice	.96	.72	1.90
Group discussion	.98	.78	1.70
Lecture	.80	.47	3.09**
Nursing care conferences	1.20	.82	2.91**
Panel presentations	1.65	1.18	2.78**
Programmed learning	1.76	1.27	2.86**
Questioning	1.20	.99	1.69
Role playing	1.28	1.08	1.50

(table continues)

Table 5.23 (continued)

Teaching strategies Knowledge/skill	Level of education: Group 1 N = 88 RN Diploma & other Baccalaureate Mean	Group 2 N = 76 Baccalaureate & other Master's/ Master's & other Mean	t-Value
Seminars	1.24	1.03	1.42
Simulation techniques	1.52	1.28	1.49
Team teaching	1.34	1.01	2.04*

* Significant at <0.05.
** Significant at <0.01.

perceived a greater need for professional development on all items relating to teaching strategies than did those who were more qualified. Statistically significant differences between the groups were observed in their perceived knowledge and skills of such teaching strategies as buzz group, debate, lecture, nursing care conferences, panel presentations, programmed learning, brainstorming, demonstration, and teaching strategies. On these items, the more qualified respondents had lower discrepancy scores than did the less qualified respondents. There were no significant differences between the two groups in respect to the remaining items.

Teaching Experience

Table 5.24 reports the results of analysis of responses relating to teaching strategies by total years of teaching experience in nursing. On all items analysed, the mean discrepancy scores for the two groups differed significantly. Respondents possessing six or fewer years of teaching experience in nursing perceived a greater need for professional development than did those respondents with seven years or more teaching experience, as demonstrated by the higher mean scores on all items analysed.

Table 5.24

Results of Analysis of Differences in Discrepancy Scores Relating to Teaching Strategies by Years of Teaching Experience of Nurse Educators

Teaching strategies Knowledge/skill	Teaching experience: Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
Brainstorming	1.41	.82	4.19**
Buzz group	1.63	1.10	3.10**
Computer-assisted learning	2.41	2.03	2.48*
Case studies	1.11	.80	2.38*
Debate	1.59	1.22	2.11*
Demonstration	.82	.55	2.21*
Educational games	1.88	1.36	3.15**
Field trips	1.57	.84	4.17**

(table continues)

Table 5.24 (continued)

Teaching strategies Knowledge/skill	Teaching experience: Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
Guided practice	1.07	.66	3.45**
Group discussion	1.08	.70	3.31**
Lecture	.97	.38	5.82**
Nursing care conferences	1.35	.76	4.58**
Panel presentations	1.82	1.10	4.47**
Programmed learning	1.92	1.20	4.24**
Questioning	1.32	.92	3.22**
Role playing	1.53	.88	4.45**
Seminars	1.44	.87	3.96**
Simulation techniques	1.67	1.22	2.82**
Team teaching	1.64	.81	5.50**

* Significant at <0.05.
** Significant at <0.01.

Interpersonal - Student/Teacher Interaction

Comparisons of the means of desired and current levels of development on knowledge and skills relating to student/teacher interactions are presented in Table 5.25. Respondents indicated that they are currently performing at moderate to high levels on all items. Their highest current level of performance involved having high knowledge

Table 5.25

Comparison of Means of Desired and Current Levels of Development on Knowledge and Skills Relating to Student/Teacher Interaction

Interpersonal Knowledge/skill	Mean		
	Current level	Desired level	Difference
A. Student/teacher interaction			
Understanding the effects of stress on students' performance	3.16	4.58	1.42
Assisting students to meet their learning goals	3.32	4.49	1.17
Responding constructively to activities initiated by students	3.12	4.29	1.17
Helping students become independent learners	3.43	4.54	1.11
Learning how to involve students in learning activities	3.78	4.86	1.08
Developing effective interpersonal relationships with students	3.85	4.85	1.00
Learning to consider students' cultural differences	3.85	4.82	.97
Developing sensitivity to students' social and emotional needs	3.90	4.86	.96
Using mentoring techniques	3.93	4.77	.84
Becoming familiar with the characteristics of students	4.04	4.86	.82
Giving students constructive feedback	3.98	4.80	.82

and skills related to students' characteristics, being able to give students constructive feedback, and using mentoring techniques. As is indicated by the discrepancy scores, respondents desired higher knowledge/skill levels in understanding the effects of stress on students' performance, assisting students to meet their learning goals, and responding constructively to activities initiated by students. Respondents' perceived needs ranged from high to very high in their interpersonal relationships with their students.

Age

When grouped according to age, respondents 40 years of age or younger generally perceived a greater need to improve their interpersonal relationships with their students than did respondents 41 years of age or older. As is indicated by results of the analysis in Table 5.26, the younger respondents' greatest perceived need related to the use of mentoring techniques, learning to consider students' cultural differences, and helping students become independent learners. These were the same items on which there was the greatest perceived need by respondents 41 years of age or older, even though the degree of need was not as great as their younger counterparts. The groups were not significantly different in the level of need to develop effective interpersonal relationships with their students.

Level of Education

Two groups of respondents' discrepancy scores were analysed in relation to knowledge and skills of student/teacher interpersonal relationships based on highest level of education. The results presented

Table 5.26

Results of Analysis of Differences in Discrepancy Scores Relating to Student/Teacher Interaction by Age of Nurse Educators

Interpersonal Knowledge/skill	Age: Group 1 N = 103 40 or younger Mean	Age: Group 2 N = 66 41 or older Mean	t-Value
A. Student/teacher interaction			
Assisting students to meet their learning goals	1.14	.70	4.30**
Helping students become independent learners	1.23	.85	3.38**
Understanding the effects of stress on students' performance	.93	.64	2.53*
Responding constructively to activities initiated by students	1.09	.79	2.75**
Developing sensitivity to students' social and emotional needs	.98	.57	3.52**
Learning how to involve students in learning activities	1.14	.79	3.17**
Becoming familiar with the characteristics of students	.98	.62	3.03**
Learning to consider students' cultural differences	1.37	1.03	2.35*
Giving students constructive feedback	1.03	.74	2.42*
Developing effective interpersonal relationships with students	.68	.58	.95
Using mentoring techniques	1.62	1.29	2.11*

* Significant at <0.05.
** Significant at <0.01.

in Table 5.27 indicated that the groups tended to differ in the degree of perceived need for professional development relating to student/teacher interactions. Respondents with only a R.N. Diploma plus other qualifications or a Baccalaureate degree reported a higher degree of perceived need for professional development on all items analysed than did the better qualified respondents in Group 2.

Table 5.27

Results of Analysis of Differences in Discrepancy Scores Relating to Student/Teacher Interaction by Level of Education of Nurse Educators

Interpersonal Knowledge/skill	Level of education: Group 1 N = 89 RN Diploma & other Baccalaureate Mean	Group 2 N = 77 Baccalaureate & other Master's/ Master's & other Mean	t-Value
A. Student/teacher interaction			
Assisting students to meet their learning goals	1.10	.82	2.71**
Helping students become independent learners	1.20	.96	2.10*
Understanding the effects of stress on students' performance	.89	.74	1.25
Responding constructively to activities initiated by students	1.03	.89	1.25
Developing sensitivity to students' social and emotional needs	.96	.69	2.19*
Learning how to involve students in learning activities	1.11	.87	2.18*

(table continues)

Table 5.27 (continued)

Interpersonal Knowledge/skill	Level of education: Group 1 N = 89 RN Diploma & other Baccalaureate Mean	Level of education: Group 2 N = 77 Baccalaureate & other Master's/ Master's & other Mean	t-Value
A. Student/teacher interaction			
Becoming familiar with the characteristics of students	1.06	.62	3.76**
Learning to consider students' cultural differences	1.37	1.08	2.03*
Giving students constructive feedback	1.10	.73	3.12**
Developing effective interpersonal relationships with students	.69	.58	.93
Using mentoring techniques	1.58	.40	1.15

* Significant at <0.05.
** Significant at <0.01.

The same three items which correlated with age produced the greatest perceived need for development for both groups based on level of education, except that the degree of need was lower for the older respondents.

Teaching Experience

Significant differences were observed between the teaching experience groups on 8 of 11 items in Table 5.28. The items on which there was the greatest difference in perceived need for professional

Table 5.28

Results of Analysis of Differences in Discrepancy Scores Relating to Student/Teacher Interaction by Years of Teaching Experience of Nurse Educators

Interpersonal Knowledge/skill	Teaching experience: Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
A. Student/teacher interaction			
Assisting students to meet their learning goals	1.23	.76	4.75*
Helping students become independent learners	1.33	.89	3.90*
Understanding the effects of stress on students' performance	1.05	.63	3.74*
Responding constructively to activities initiated by students	1.18	.81	3.46*
Developing sensitivity to students' social and emotional needs	1.03	.65	3.14*
Learning how to involve students in learning activities	1.26	.80	4.33*
Becoming familiar with the characteristics of students	1.04	.67	3.19*
Learning to consider students' cultural differences	1.36	1.37	1.52
Giving students constructive feedback	1.21	.71	4.15*
Developing effective interpersonal relationships with students	.75	.55	1.92
Using mentoring techniques	1.62	1.39	1.44

* Significant at <0.01.

development were the same ones identified with age and level of education. Diploma nurse educators in the two experience categories evidently agreed that the use of mentoring techniques and helping students to become independent learners, while considering their cultural differences, are important areas for further professional development.

Interpersonal - Personal/Professional Development

Comparison of desired and current levels of development on knowledge and skills relating to personal and professional development are presented in Table 5.29. On the current level scale respondents indicated that they are performing at a moderate to high level but preferred their performances to be at a very high knowledge and skill level. Respondents' highest current level of performance related to role modeling personal and professional behaviors; using feedback from peers, students, and supervisor to improve general instructional performance; understanding faculty evaluation; and learning to be innovative and creative in teaching. The lowest current levels of performance were related to implementing the different components of the nurse educator's roles, developing effective interpersonal relationships with peers and administrators, and conducting nursing research. The lowest-rated items on the current level scale also had the highest discrepancy means indicating the area in which the perceived need for professional development was deemed the greatest.

Age

When respondents' knowledge and skills relating to personal and professional development were analysed by age groups, as shown in

Table 5.29

Comparison of Means of Desired and Current Levels of Development on Knowledge/Skills Relating to Personal/Professional Development

Interpersonal Knowledge/skill	Mean		
	Current level	Desired level	Difference
B. Personal/professional development			
Implementing the different components of the nurse educator's role	3.27	4.76	1.49
Developing effective interpersonal relationships with peers and administrators	3.50	4.74	1.24
Conducting nursing research	3.77	4.79	1.02
Fulfilling responsibilities towards peers	3.95	4.88	.93
Maintaining nursing knowledge at a current level	3.84	4.72	.88
Using self-evaluation to improve teaching effectiveness	3.91	4.76	.85
Keeping abreast of current trends and issues in nursing research	4.00	4.80	.80
Learning to be innovative and creative in teaching	4.10	4.79	.69
Role modeling personal and professional behaviors	4.21	4.85	.64
Using feedback from peers, students, and supervisor to improve general instructional performance	4.17	4.79	.62
Understanding faculty evaluation	4.16	4.74	.58

Table 5.30, on all but one item--keeping abreast of current trends and issues in nursing research--the younger respondents perceived a greater need for professional development than did respondents 41 years of age or older. Differences between means were statistically significant for 6 of the 11 items. As is indicated by results of the analysis in Table 5.30, the younger respondents' greatest perceived need related to conducting nursing research, keeping abreast of current trends and issues, maintaining nursing knowledge at a current level, and learning to be innovative and creative in teaching. As shown in the table, these were

Table 5.30

Results of Analysis of Differences in Discrepancy Scores Relating to Personal/Professional Development by Age of Nurse Educators

Interpersonal Knowledge/skill	Age: Group 1 N = 103 40 or younger Mean	Age: Group 2 N = 66 41 or older Mean	t-Value
B. Personal/professional development			
Developing effective interpersonal relationships with peers and administrators	.97	.68	2.48*
Fulfilling responsibilities towards peers	.63	.50	1.28
Role modeling personal and professional behaviors	.72	.48	2.44*
Implementing the different components of the nurse educator's role	1.16	.79	2.92**

(table continues)

Table 5.30 (continued)

Interpersonal Knowledge/skill	Age: Group 1 N = 103 40 or younger Mean	Age: Group 2 N = 66 41 or older Mean	t-Value
B. Personal/professional development			
Using self-evaluation to improve teaching effectiveness	.95	.58	3.30**
Understanding faculty evaluation	1.02	.67	2.51*
Using feedback from peers, students, and supervisor to improve general instructional performance	.72	.66	0.47
Conducting nursing research	2.13	1.76	1.96
Keeping abreast of current trends and issues in nursing research	1.32	1.37	-0.37
Maintaining nursing knowledge at a current level	1.09	.91	1.54
Learning to be innovative and creative in teaching	1.47	1.08	3.40**

* Significant at <0.05.
** Significant at <0.01.

the same items on which there was the greatest perceived need for professional development by respondents 41 years of age or older. Respondents 40 years of age or younger felt less comfortable in implementing the different components of their roles and using self-evaluation to improve teaching effectiveness than did those who were 41 years of age or older.

Level of Education

Respondents were grouped according to highest level of education in knowledge and skills relative to personal and professional development. Results presented in Table 5.31 indicated that the lower qualified respondents perceived a greater need for professional development than did the more qualified respondents. The items that correlated with age as requiring a greater degree of emphasis for professional development were the same ones which correspond to level of education. Conducting nursing research was one area perceived as extremely important for development by both groups. There were no significant differences between both groups on the other items.

Table 5.31

Results of Analysis of Differences in Discrepancy Scores Relating to Personal/Professional Development by Level of Education of Nurse Educators

	Level of education		
Interpersonal Knowledge/skill	Group 1 N = 89 RN Diploma & other Baccalaureate Mean	Group 2 N = 77 Baccalaureate & other Master's/ Master's & other Mean	t-Value
B. Personal/professional development			
Developing effective interpersonal relationships with peers and administrators	.89	.86	0.26
Fulfilling responsibilities towards peers	.67	.48	1.92

(table continues)

Table 5.31 (continued)

Interpersonal Knowledge/skill	Level of education: Group 1 N = 89 RN Diploma & other Baccalaureate Mean	Group 2 N = 77 Baccalaureate & other Master's/ Master's & other Mean	t-Value
B. Personal/professional development			
Role modeling personal and professional behaviors	.70	.56	1.36
Implementing the different components of the nurse educator's role	1.11	.92	1.50
Using self-evaluation to improve teaching effectiveness	.89	.73	1.39
Understanding faculty evaluation	.98	.81	1.23
Using feedback from peers, students, and supervisor to improve general instructional performance	.73	.67	0.50
Conducting nursing research	2.18	1.79	2.09
Keeping abreast of current trends and issues in nursing research	1.42	1.26	1.21
Maintaining nursing knowledge at a current level	1.02	1.01	0.08
Learning to be innovative and creative in teaching	1.45	1.16	2.56*

* Significant at <0.05.

Teaching Experience

For the purposes of analysis, respondents were placed into two groups according to total years of teaching experience in nursing. As indicated in Table 5.32, the two groups were different in their perceived need for professional development in this area. Group 1 expressed a greater need for improvement in knowledge/skills on 8 of the 11 items than did the Group 2 respondents. According to discrepancy scores between current level and desired level of knowledge and skill, conducting nursing research and learning to be innovative and creative in teaching were perceived as particularly important areas for further professional development by the younger educators. In addition, nurse educators with six or fewer years of teaching experience also felt less skilled and knowledgeable in implementing the different components of their roles, in understanding faculty evaluation, and in using self-evaluation than did their counterparts with seven years or more of teaching experience. Keeping abreast of current trends and issues in nursing research was one area in which both groups expressed similar desired need for improvement. These respondents also indicated a greater perceived need for improvement in developing interpersonal relationships with peers and administrators, in fulfilling responsibilities, and in role modeling personal and professional behaviors than did the more experienced respondents. There were no significant differences with respect to the other three items relating to the interpersonal component comprising personal and professional development.

Table 5.32

Results of Analysis of Differences in Discrepancy Scores Relating to Personal/Professional Development by Years of Teaching Experience of Nurse Educators

Interpersonal Knowledge/skill	Teaching experience: Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
B. Personal/professional development			
Developing effective interpersonal relationships with peers and administrators	1.04	.72	2.76**
Fulfilling responsibilities towards peers	.71	.46	2.53*
Role modeling personal and professional behaviors	.75	.53	2.18*
Implementing the different components of the nurse educator's role	1.18	.87	2.43*
Using self-evaluation to improve teaching effectiveness	1.01	.64	3.30**
Understanding faculty evaluation	1.11	.71	2.93**
Using feedback from peers, students, and supervisor to improve general instructional performance	.73	.67	0.47
Conducting nursing research	2.29	1.74	2.94**
Keeping abreast of current trends and issues in nursing research	1.42	1.27	1.22

(table continues)

Table 5.32 (continued)

Interpersonal Knowledge/skill	Teaching experience: Group 1 N = 73 6 or fewer yrs. Mean	Group 2 N = 95 7 or more yrs. Mean	t-Value
B. Personal/professional development			
Maintaining nursing knowledge at a current level	1.08	.97	0.99
Learning to be innovative and creative in teaching	1.45	1.21	2.09*

* Significant at <0.05.
** Significant at <0.01.

Differences Among Program-Related Categories of Respondents

Results of the analysis relating to type of program, size of school, and area of major responsibilities in the knowledge and skill areas are reported together because not many significant differences in professional development needs were related to these variables.

Type of Program

Tables are not reported for type of program. Respondents were placed in two groups depending on whether they were in college-based or hospital-based programs. Seventy of the respondents were in the first group, and 99 were in the second group. Results of t-tests indicated that there were no significant differences in discrepancy scores on the various items associated with the adult learner, evaluation of clinical

and classroom theory, school's curriculum, interpersonal relationships including student-teacher interaction, and personal/professional development categories.

Discrepancy scores for two items in the school of nursing area were significantly different between the two groups. These items reflected knowledge about available community services and human resources, and future plans for the school of nursing. The hospital-based nurse educators indicated a stronger need for professional development in regard to these two items than did the college-based respondents.

In the classroom instruction category, discrepancy scores indicated that hospital-based respondents had a greater need for professional development in regard to using a variety of instructional methods than did their college-based counterparts. The only other two items on which significant differences were observed came from the teaching strategies area. The two items dealt with the use of case studies and demonstration teaching strategies. Results indicate that the college-based respondents had a greater need for professional development in the use of case studies and demonstration techniques than did the hospital-based nurse educators.

Size of School

Differences in discrepancy scores were analyzed for two groups in terms of number of faculty members. The first group of respondents (80) were in schools with fewer than 30 faculty members, while the second group (89) were in schools with more than 30 faculty members.

Two items relating to the school of nursing, specifically, knowledge about available community services and human resources, and future plans

for the school of nursing, were perceived as two areas in which a higher need for professional development was indicated by respondents in schools with more than 30 members. Respondents in schools with more than 30 members also revealed a higher need for professional development in their knowledge of a variety of instructional methods in relation to classroom instruction as compared to those respondents from schools with less than 30 members.

Analysis relating to the extent of the perceived need for development relating to teaching strategies by size of school, shown in Table 5.33, indicated that there were statistically significant

Table 5.33

Results of Analysis of Differences in Discrepancy Scores Relating to Teaching Strategies by Size of School

Teaching strategies Knowledge and skill	Size of school: Group 1 N = 80 <30 faculty Mean	Size of school: Group 2 N = 89 >30 faculty Mean	t-Value
Brainstorming	1.41	.82	4.19**
Buzz group	1.63	1.11	3.10**
Computer assisted learning	2.41	2.03	2.48*
Case studies	1.11	.80	2.38*
Debate	1.59	1.22	2.11*
Demonstration	.82	.55	2.21*
Educational games	1.88	1.36	3.15**

(table continues)

Table 5.33 (continued)

Teaching strategies Knowledge and skill	Size of school: Group 1 N = 80 <30 faculty Mean	Size of school: Group 2 N = 89 >30 faculty Mean	t-Value
Field trips	1.57	.84	4.17**
Guided practice	1.07	.66	3.45**
Group discussion	1.08	.70	3.31**
Lecture	.97	.38	5.82**
Nursing care conferences	1.35	.76	4.58**
Panel presentations	1.82	1.11	4.47**
Programmed learning	1.92	1.20	4.24**
Questioning	1.32	.92	3.22**
Role playing	1.53	.88	4.45**
Seminars	1.44	.87	3.96**
Simulation techniques	1.67	1.22	2.82**
Team teaching	1.64	.81	5.50**

* Significant at <0.05.
** Significant at <0.01.

differences between the two groups. Schools with fewer than 30 members revealed a much higher need for professional development on all items listed under teaching strategies than did respondents from schools with more than 30 members. The greatest perceived need for professional development by both groups in order of importance related to using teaching strategies such as computer-assisted learning, educational

games, programmed learning, simulation techniques, debate, and panel presentations.

Analysis of the other areas did not identify any significant differences.

Area of Major Responsibility

When grouped according to area of major responsibility, respondents having only clinical or laboratory responsibilities perceived a greater need to improve their classroom management activities than did respondents having equal clinical and classroom responsibilities.

In the evaluation of the clinical practice category, discrepancy scores revealed that respondents with clinical and laboratory responsibilities had a greater need for professional development in the writing of pertinent anecdotal records than did respondents having equal classroom and clinical responsibilities.

Discrepancy scores for two items in the teaching strategies area revealed differences between the two groups. Laboratory and clinical respondents indicated a greater need for development in regard to the use of debate and educational games than did respondents with equal classroom and clinical responsibilities.

The only other item on which a significant difference was evident came from the school's curriculum area. Results revealed that respondents working only in laboratory or clinical situations had a greater need for professional development in relation to implementing the school's curriculum than did respondents who worked equally in clinical and classroom environments. Analysis of the items in the remaining areas did not reveal any significant differences.

Relative Need Across Knowledge/Skill Areas

An indication of the relative need across specific knowledge and skills as well as across general areas may be derived from an examination of current levels of performance, desired levels of performance, and discrepancy scores.

Current Level of Performance

In Table C.1 (Appendix C), the 86 knowledge/skill items are ranked on the basis of the mean ratings of the respondents on the five-point scale. Fourteen of the items had means of 4.00 or higher. Respondents appeared to be fairly confident about their performance levels and knowledge in relation to case studies, computer-assisted learning, knowledge of the nurse educator's role, available community services and human resources to their schools, and role modeling personal and professional behaviors. Respondents revealed that using feedback from peers, students, and supervisor to improve general instructional performance, understanding faculty evaluation, and conditions of employment were also areas reflecting high current knowledge/skill levels. Other items which indicate high current performance levels relate to the use of questioning techniques, learning to be innovative and creative in teaching, knowledge of the philosophy of the school of nursing, familiarity with the characteristics of the student body, providing appropriate clinical learning experiences, and keeping abreast of current trends and issues in nursing research.

For six of the items, the means were below 3.00--a lower-than-moderate level of knowledge/skill. These items all came from the teaching strategies area. They were methods related to the use of

seminars, nursing care conferences, simulation techniques, lecture, guided practice, and educational games.

The distribution of items in each area across current levels of performance is presented in Table 5.34. The results presented indicated that respondents perceived themselves as performing at a very high level on only two items--both from the teaching strategies area--relating to the use of case studies and computer-assisted learning. Respondents

Table 5.34

Distribution of Items in Each Area by Current Level of Performance

Knowledge/skill area	Level of performance			
	Very high (4.5-5.0)	High (3.5-4.4)	Medium (2.5-3.4)	Low/very low (1.5-2.4)
School of nursing	0	9	1	0
Adult learner	0	6	1	0
Classroom instruction	0	8	3	0
Evaluation (clinical)	0	5	0	0
Evaluation (theory)	0	3	2	0
School's curriculum	0	3	4	0
Teaching strategies	2	9	7	1
Interpersonal (STI)	0	7	4	0
Interpersonal (PPD)	0	10	1	0
Total	2	60	23	1

STI: Interpersonal: Student-teacher interaction
PPD: Interpersonal: Personal/professional development

indicated that their current levels of performance were high on 60 of the 86 items and medium on only 23 items. One item was rated in the low to very low category; this item related to the use of educational games as an effective teaching strategy.

Desired Level of Performance

The 86 knowledge/skill items are ranked on the basis of mean ratings of desired performance levels in Table C.2 (Appendix C).. All but three of the items have means above 4.00, indicating that respondents desire a relatively high level of performance in all aspects of performance reflected in these items. Fourteen of the items had means above 4.85, with seven of those items coming from the classroom instruction area. These items were as follows: helping students develop critical thinking abilities, knowledge of a variety of instructional methods, promoting self-directed learning, developing appropriate strategies to motivate adult learners, creating a favorable learning environment, using a variety of instructional methods, and selecting appropriate instructional materials.

Respondents indicated a desire for very high knowledge related to the nurse educator's role in the school of nursing area. The other six items from the interpersonal area revealed that respondents were very concerned with student-teacher relationships as well as with their own personal and professional development. The concerns revolved around fulfilling responsibilities towards peers, learning to involve students in learning activities, developing sensitivity to students' social and emotional needs, becoming familiar with the characteristics of students, and developing effective interpersonal relationships with students.

The three lowest means ranged from 3.49-3.98, indicating a medium to high desire for improved performance on these items. All three items related to the use of nursing care conferences, computer-assisted learning, and brainstorming as effective teaching strategies.

The distribution of items in each area across desired performance levels is presented in Table 5.35. Desired level of performance was medium on only two teaching strategies items: brainstorming and

Table 5.35

Distribution of Items in Each Area by Desired Level of Performance

Knowledge/skill area	Level of performance			
	Very high (4.5-5.0)	High (3.5-4.4)	Medium (2.5-3.4)	Low/very low (1.5-2.4)
School of nursing	9	1	0	0
Adult learner	7	0	0	0
Classroom instruction	11	0	0	0
Evaluation (clinical)	4	1	0	0
Evaluation (theory)	5	0	0	0
School's curriculum	7	0	0	0
Teaching strategies	11	7	1	0
Interpersonal (STI)	9	1	1	0
Interpersonal (PPD)	11	0	0	0
	—	—	—	—
Total	74	10	2	0

STI: Interpersonal: Student-teacher interaction
PPD: Interpersonal: Personal/professional development

responding constructively to activities initiated by students. The desired level of knowledge of the functions of administrative personnel in the school of nursing and maintaining students' skills checklists in the evaluation of clinical practice was high. The use of teaching strategies such as lecture, demonstration, simulation techniques, seminars, guided practice, nursing care conferences, and computer-assisted learning was also rated as high. In the area of interpersonal relationships, respondents also indicated a high desired level of performance in assisting students to meet their learning goals. The other 74 items were rated by respondents as being very high on the desired level of performance scale. At no time was respondents' desired level of knowledge/skill rated low or very low. Overall, respondents revealed a high to very high desired level of performance on 84 of the 86 items.

Need for Professional Development

In Table C.3 (Appendix C) the knowledge/skill items are ranked according to discrepancy scores, that is, according to the difference between desired and current levels of performance. As indicated in the table, the use of educational games as an effective teaching strategy was perceived by respondents as presenting the greatest need for professional development. Curriculum planning, development, and revision were also seen as very important areas for improvement. Teaching strategies such as simulation techniques and the use of lectures were ranked in this category along with knowledge related to construction of examination test items. Respondents were concerned with their use of appropriate strategies to motivate the adult learner and how well they implemented

the different components of their roles. Conversely, the lowest discrepancy scores on the last 10 items indicated that respondents felt relatively comfortable in using teaching strategies such as group discussion and questioning techniques.

Respondents also indicated that their knowledge about their school's philosophy, conditions of employment, expected involvement in committees, and the nurse educator's role was quite high. They felt comfortable in role modeling personal and professional behaviors, understood their faculty evaluations, and were able to utilize feedback from a variety of sources to improve their general instructional performance. Knowledge of teaching strategies related to computer-assisted learning and brainstorming were not seen as priority areas for improvement. Table 5.36 outlines the distribution of items in each area by discrepancy scores. It is evident from the data presented that the areas of classroom instruction, teaching strategies, and the school's curriculum showed the greatest perceived need for improvement in knowledge and skills. Respondents varied considerably in their desire for professional development in the area of knowledge/skills related to teaching strategies. The desire for improvement ranged from very high to low.

Summary

In this chapter the degree of perceived need for professional development in seven specified knowledge and skill areas was reported.

The results indicated that there were significant differences among respondents, especially in the variables related to age, highest level of education, and teaching experience, and to a lesser extent in the remaining variables. Although all respondents indicated a high to very

Table 5.36

Distribution of Items in Each Area by Discrepancy Score

Knowledge/skill area	Discrepancy score			
	Very high (4.5-5.0)	High (3.5-4.4)	Medium (2.5-3.4)	Low/very low (1.5-2.4)
School of nursing	0	4	5	1
Adult learner	0	4	3	0
Classroom instruction	3	7	0	0
Evaluation (clinical)	0	1	3	0
Evaluation (theory)	0	3	3	0
School's curriculum	1	7	0	0
Teaching strategies	3	7	7	2
Interpersonal (STI)	0	6	5	0
Interpersonal (PPD)	0	3	8	0
Total	7	42	34	3

STI: Interpersonal: Student-teacher interaction
PPD: Interpersonal: Personal/professional development

high need for professional development, when compared with the older respondents, the younger, less qualified, and less experienced respondents expressed a greater degree of need in all seven knowledge and skill areas examined.

The results also indicated that respondents from institutions with fewer than 30 faculty members revealed a much higher perceived need for professional development in regard to teaching strategies than did

respondents from institutions with 30 or more faculty members. Respondents who reported having only clinical or laboratory responsibilities attached a greater importance to managing classroom activities and writing pertinent student anecdotal reports than did respondents who had equal classroom and clinical responsibilities. No significant differences were noted with respondents having additional responsibilities other than teaching with the nursing service sector or with type of employment.

Overall, the analysis of the responses of diploma nurse educators revealed that these educators perceived themselves as currently possessing a high knowledge/skill level but, instead, would prefer to perform at a very high level except in the teaching strategies area where desired needs ranged from low to very high.

Chapter 6

Meeting Professional Development Needs

Results of analyzing responses to the three open-ended questions in Section III of the questionnaire are presented in this chapter. These questions were designed to give each respondent an opportunity (1) to summarize perceived professional development needs, (2) to indicate plans for meeting those needs, and (3) to identify if the proposed higher educational requirements for beginning nurses are in any way influencing the desire to engage in professional development activities. The comments and suggestions made by the respondents were categorized into subject matter themes. A number of respondents made some general comments which did not fit into the above categories and are reported under "General Comments."

Need for Profession Development

One of the major aims of the study was to identify the perceived need for further professional development in relation to diploma nurse educators' teaching responsibilities. The seven knowledge and skill areas serve as the basis for presenting the results of the analysis. These areas are the school of nursing, the adult learner, classroom instruction, evaluation of clinical practice and classroom theory, the school's curriculum, teaching strategies, and interpersonal relationships including student-teacher interaction and personal/professional development.

School of Nursing

Regarding institutions in which nurses work, respondents indicated that they were concerned by changes taking place in schools of nursing which made them feel insecure about the future. Sixty-four of the 169 respondents revealed that the uncertainty surrounding proposed collaborative efforts by their schools with universities and the lack of information from administrators have made them uncomfortable in their current positions. A typical comment was:

> My concern this year has to do with what social, political, and economic factors are having on the changes taking place in my School of Nursing. There are massive curricular changes related to collaborative efforts being pursued with [major public institutions offering graduate nursing degrees in Alberta] which have placed unusually heavy responsibilities on the shoulders of the more experienced nursing instructors, yet we are not sure we will be the ones who will implement these changes since we do not have graduate degrees. This made many of us very insecure, and information is not readily forthcoming from our supervisors and administrators.

Other comments related to lack of knowledge about the nurse educator's role and community services available to schools of nursing in Alberta. These comments were as follows:

> I feel that as a nursing instructor I am placed in a unique position to facilitate students' learning and to apprise them of agencies available for their use. However, I am not sure what is available in the community and would like to know more about them.

> A nursing instructor is a jack of all trades, but how long does it take to be a master of all of them? Sometimes I find myself filling the role of a counsellor or mother more often than a teacher. Sometimes I am so overwhelmed I feel like quitting and becoming a full-time housekeeper; at least my job descriptions would be clear!

It appears that major curricular changes taking place in institutions in which diploma nurses work, coupled with collaborative efforts to maximize entry of more nurses into baccalaureate nursing programs, are not only

increasing their workload, but also making them feel insecure in their current positions. It appears that the workloads are somewhat taxing to the nurse educators.

The Adult Learner

Nearly fifteen of the respondents felt that they required a greater understanding of the adult learner's characteristics as well as of methods to motivate and teach adult learners. The following responses typify some of the respondents' perceptions of their need for professional development in this area:

> I want to know more about the characteristics of adult learners, how to get them to think critically and to make them feel comfortable, especially in learning the classroom theory. The older adult students sometimes have so much practical skills and experiences and coped so well in the clinical area, it is a shame to have them leave or struggle through nursing school because I am not fully equipped to help them learn.
>
> I found my post BScN program did not prepare me too well to teach adult learners. There should be greater emphasis on the role (characteristics) of the adult learner in current nursing programs. We should look at implications for the student, the program, and the profession.

Some respondents implied that a better understanding of the adult learner might help the neophyte nurse educator cope better in both the clinical and the classroom areas.

Classroom Instruction

Fifty-two of the 169 respondents (30.76%) indicated that they had a very high need for professional development in classroom instruction. Such terms as "promotion of problem solving and critical thinking in students" and "how to enhance critical thinking skills in the student" were used by several of the respondents. Thirteen of the respondents

stated that critical thinking should be encouraged in peers, self, and students.

Respondents also suggested that enabling the student to apply theoretical knowledge in the practice setting was crucial to the teaching-learning process. The following were representative of the respondents' comments:

> Developing more variety in classroom instruction and learning various instructional methods/techniques are important.
>
> Better classroom instructional skills, better teaching strategies, better approaches to teaching, better use of a variety of instructional materials and better training on how to teach nursing are the areas in which I need help fast!

Another respondent concluded that good classroom instructional knowledge and techniques would not only help to maintain the high standard of diploma nursing education, but also would create a new group of critical thinkers. Evidently, diploma nurse educators are concerned about their performance in the use of a variety of instructional methods and the promotion of critical thinking in their students.

School's Curriculum

Twenty-two of the respondents indicated that they require some professional development in the area of the school's curriculum because they are having difficulties explaining the curricular concepts clearly to new faculty members. This lack of competence related to the curriculum is reflected in some of the following statements:

> I am presently involved in curiculum work. There are many changes and this would be an area that would be a focus for further professional development for me since I encounter difficulty in explaining to new faculty members what the curriculum is all about.
>
> I am interested in curriculum development for adult learners.

> Proposed curriculum changes require changes in competence. It is important to update curriculum development skills and strategies.
>
> Things are changing so fast in this school due to EP 2000 that I am having difficulty understanding all the curricular changes. At one time I was a near expert on what my school curriculum was all about, but now I am not so sure.

A total of 14 respondents would like some professional development in planning and developing the curriculum, as well as being involved with curricular changes in their schools of nursing. One respondent stated that perhaps by being involved in curricular activities, she may develop techniques to explain the relevance of the curriculum to new faculty and students.

Another respondent suggested that administrators should carefully assess the curricular changes they are making in order to determine if the changes are warranted and feasible.

> We should not change for the sake of change. Sound thinking and planning should go into this process. I see what we have now as being quite good but changes are being made just because they may be more acceptable to the [institutions collaborating with our schools to offer baccalaureate nursing education]. I don't agree and I think we will suffer for these unnecessary curricular changes in the future.

It appears that curricular changes in diploma nursing schools are creating a need for further professional development in curriculum planning and development for diploma nurse educators.

Evaluation

In the evaluation of classroom and clinical practice, nineteen respondents expressed a desire to improve their clinical skills to enable them to become more effective teachers. Some typical comments were as follows:

> Developing strategies for helping students whose clinical practice is not meeting course objectives and working towards improving these students' weaknesses and self-esteem are areas in which I feel uncomfortable and, therefore, would like to improve.

Some educators want to gain a better understanding of their role as clinical educators and to gain more expertise in clinical teaching and evaluation of students. One educator remarked that special information related to effective clinical instruction of students in the hospital setting would be helpful. Other educators would like to enhance their own clinical skills on an ongoing basis and develop strategies on how to do research in the clinical setting. Constructing examination test items and oral questioning were areas seen as important for professional development by more than half of the respondents. In general, evaluation is a high priority for diploma nurse educators, expecially in the construction of examination test items and clinical research.

Teaching Strategies

Fifty-four of the respondents commented that they require greater professional development in teaching strategies. Computer-assisted learning, improvement in lecture delivery and questioning techniques, as well as maximizing individual participation when teaching large groups of students were the strategies most frequently mentioned.

The following comments were made by some of the respondents:

> How do I incorporate computers into teaching? How do I incorporate more independent/self-learning, program learning, and computers into the professional and individual content areas to enhance independence?

> I would like to develop innovative ways to lecture and use AV aids to become proficient in questioning techniques.

> I would like to be creative and be able to establish rapport (ease of two-way discussions with students in seminars and panel discussions).

Diploma nurse educators appear to be concerned about promoting independence in learning while at the same time being competent in the use of good communication techniques.

Interpersonal Interactions

With regard to student-teacher interaction, diploma nurse educators felt a particular desire for professional development in helping students to become independent learners and being sensitive to cultural differences. In the area of student-teacher interactions and personal and professional development, nurse educators indicated that they would like to develop skills in certain areas such as:

> conducting nursing research and gaining a broader perspective on the whole area of nursing education and factors which influence it.

> I want to become more knowledgeable about the actual practical implementation of primary health care theory so as to actually implement and become actively involved in primary health care service, and then to incorporate this new concept into nursing education and research.

Twenty of the respondents were concerned about their relationships with students and expressed a desire for improvement in this area. The following remarks typify the beliefs of some respondents about student-teacher interpersonal relationships:

> Sometimes I try so hard to please my students, yet student evaluations are sometimes so negative, I feel like quitting. I have completed communication courses and the nurses in the hospital and my peers think I am a good communicator. I would like to expend more time on personal development in this area because I love teaching and would like to know what I'm doing wrong.

> I have a hard time accepting students' criticisms of my performance even if they are right. I also have to learn to involve them more in the classes I am teaching but I feel so intimidated. I definitely have these areas on the front burner to work on if my school will provide me with enough time and incentive to do so.
>
> My school has students with different cultural backgrounds and some of them have tendencies to say an instructor is prejudiced if they don't get their way. I can't afford to lose my job because of such allegations, so I sometimes pass them despite my reservations. I would like to develop a better understanding of these problems, because I sometimes resent some of the implications and feel helpless to vindicate myself. I want to have good relationships with my students but sometimes I have to hold back and project a professional attitude which may be perceived as cold and unyielding so as not to get into trouble due to cultural differences.

Others commented that understanding the different components of the nurse educator's role would help them become better role models and more effective educators.

Multiculturalism with its accompanying differences in culture seems to be having an impact on how nurse educators interact with some students. Some respondents' comments implied that they may have engaged in unethical activities by passing unsatisfactory students because of their fear of being labelled as prejudiced. Nursing research was also a very important area for professional development for these respondents.

Future Plans for Professional Development

A relatively large number of respondents (84) indicated that they are or would be returning to university to complete a Master's degree. Thirty-two of those respondents planned to complete their Master's degree in education and 21 in nursing; the other areas mentioned included psychology, family studies, and administration. Seventeen respondents were in the process of pursuing doctoral studies or anticipated doing so

in the near future. Other comments about future plans for professional development were as follows:

> I would like to complete a Master's degree when I get some funding. I would rather do this in education, but may be forced to do it in nursing since the AARN will not fund nurses completing education in programs other than nursing.
>
> I would like to study at the Master's level. Would like nursing, but the program doesn't have enough flexibility; therefore I will go to education.
>
> A nursing Master's is desirable, but [graduate nursing programs in Alberta] do not allow for any specialization in anything other than research. Give me a break and bring back the reality into what nurse educators really do--teaching.
>
> Perhaps a MN. I would like to see a Master's in nursing with specialization in one of the following:
> education, especially teaching the know-how;
> administration;
> research; and
> clinical,
> but not only in research or clinical as is presently available in Alberta.

Of the 84 respondents, 21 would like to complete a Master's degree in nursing but felt the emphasis placed on research and the lack of courses addressing the know-how of teaching are preventing them from committing themselves to a degree in nursing. It would appear that nurse educators in the diploma nursing schools have a strong desire to pursue graduate education that is pertinent to their job responsibilities. They are suggesting that Master's in Nursing programs be expanded to incorporate more specialization, especially in the area of teaching knowledge and skills.

Professional Development and EP 2000

Over the past decade nursing leaders in Canada have promoted the baccalaureate degree for beginning nurses. This position was accepted by

the Canadian Nurses' Association and the Alberta Association of Registered Nurses. Both associations indicated that by the year 2000 all nurses entering the nursing profession should possess a baccalaureate degree in nursing. This is called the EP 2000 position.

Many diploma nurse educators indicated that EP 2000 was good for nursing in Alberta. The following were some of the comments made by the respondents:

> I support the goals of EP 2000 and believe that the change in education-need for MN Instructors and Professors at the University level is more than apparent.
>
> It is certainly changing administration of nursing schools and hospitals. I hope this will be for the best. I want to be in the forefront of things when EP 2000 goal is achieved. I hope the division I sense among nurses will improve for our sakes.
>
> It is of critical importance and sense of accomplishment to become as knowledgeable and educated as I can as a professional educator--it is the only way the nursing profession can become legit.
>
> I recently moved from the States where nursing is quite influenced by EP 2000. BSN is the standard and MSN is becoming more prominent. I feel a BSN is important to nursing as a profession and I want to further my education in order to continue in nursing education. It has a major influence on my career goals.
>
> EP 2000 has added a sense of legitimacy to my educational plans on a social level only. Seeing students graduate from the program has assisted me to solidify my beliefs that a baccalaureate degree is indeed the minimum entry level for nurses to function effectively and in the profession now, and as it must develop in the future. I am working on a PhD education since 1982 and will no doubt arrive there long before the year 2000.

Fifteen respondents expressed concern about the stability of their jobs. Five of the respondents explained that attitudes on the part of some administrators made them feel there will not be a place for them in nursing schools if they do not complete a Master's degree. The following comments were made regarding job stability:

> Because of the increasing educational requirements, I see an increasing need to attain further educational development for myself to improve my job security for the future.
>
> I feel a need to get a Master's degree if I plan to continue to teach even though that qualification will not necessarily make me a better teacher, but I will at least keep my job.
>
> It [EP 2000] is responsible for my considering further education. I think it may be good for nursing in the long-term, but now it is creating a lot of uncertainty, especially in job security and where the future of nursing is headed. The vision is good but is poorly planned out and not well articulated.

Two of the respondents expressed concern about the nursing organization's ability to educate the general membership about the EP 2000 issues. Their comments are as follows:

> It is a difficult question to answer as the whole issue is somewhat confusing to me. I support the idea but feel much more discussion is needed with the nursing membership--not just leaders who often are removed from bedside nursing and don't always understand the R.N. perspective. I would like to participate in an open discussion about the issue. I am eventually interested in curriculum planning for preparing a graduate after the year 2000.
>
> I am for professionalism in nursing and I think EP 2000 is pointing us in that direction. I wish, though, that the AARN and our national organization would be more clear on the topic.

Another area of concern expressed by some of the respondents related to costs for completion of graduate education.

> I had seriously considered a Master's degree. Because of the political situation in Alberta, I feel I could spend my time more wisely. Two years to obtain a Master's degree with loss of income--I do not see significant gains.
>
> I feel EP 2000 is important to the nursing profession but it is hard going cost wise to get the adequate preparation required to achieve its goals. A good financial incentive to return to school would be beneficial to those who would like to improve themselves.

Although the majority of respondents were, or anticipated, completing graduate studies in the future, about 17 of the respondents

felt "pressured" to do so. Their comments are reflected in the following statements:

> I would not go back to university if EP 2000 position was not so prominent. I would not be in such a hurry to complete graduate education if EP 2000 was not so powerful now. I think I will need a PhD to teach in the next ten years.

> There is pressure to update qualifications. The pressure is on to obtain a Master's in a short period of time. There is a push to obtain a university Master's level preparation.

> EP 2000 is making me question myself as to the realities of today's society and tomorrow's. The question "Where do I fit in with this education?" What if I had a Master's?

> Unless I get further education, I will be obsolete.

Although many nurse educators feel pressured to pursue graduate studies, 15 respondents described the EP 2000 position as motivating, encouraging, stimulating and influencing. For them it serves as an incentive for pursuing formal professional education.

A few of the respondents did not feel EP 2000 influenced their professional development. They felt that professional development was part of their responsibility "to be the best I can in my role as educator."

> I don't think it's influencing me personally because my own personal goals have included professional development. These goals would not change one way or the other regardless of EP 2000.

The EP 2000 proposal has had some effect on the desire expressed by the majority of nurse educators who would like to pursue graduate education. However, some barriers were cited by respondents. These involved lack of pertinent programs designed to meet respondents' needs, the high costs of pursuing graduate education, time constraints, and a feeling of resentment for being "pressured" to get an education not perceived by some as being necessary to fulfil their role

responsibilities. EP 2000 was viewed in both a positive and a negative manner by respondents.

General Comments

Some of the instructors made general comments. The comments are related to entry to current diploma nursing programs and the importance of the study. The following comments summarized their views:

> I don't feel motivated to be a nurse.
>
> I think rather than increasing the expectations for entry to practice, we should look closely at the type of students now entering nursing programs and increase the expectations there.
>
> Relevant entrance requirements for nursing students into diploma programs are important.
>
> My teaching focus may have to change to help students prepare for further education. I am changing my teaching focus to help students prepare for further education. Needs to be more creative and change teaching technique to more of university style.

Some of the respondents expressed the belief that the study addressing their perceived professional development need was necessary and had given them food for thought. Thirty-nine of the respondents requested that the study be made available to their organization. Some of the comments are:

> I hope your study will identify some of the instructional and curricular problems we are having and our school administrator will read it. I feel we have a long way to go to develop good teaching techniques but many won't admit they have deficiencies.
>
> Something needs to be done about giving us time to learn to teach well. I hope your study will touch on some of these areas.

General comments made by Alberta's diploma nurse educators indicate that conflicts exist in their minds about EP 2000 but that it is

necessary, and changes in attitudes and teaching techniques should be developed to help prepare current students for the expected changes.

Summary

In general, the comments made in response to the open-ended questions were generally consistent with the results obtained from the quantitative results in the questionnaire. Respondents indicted that their professional development needs in respect to their respective roles and responsibilities were not being met. Many of the nurse educators are not feeling highly competent in their roles due to inadequate preparation. Their perceptions for the types of professional development are varied but overall reflect a need for further development. EP 2000 is definitely affecting some nurse educators' desire to pursue graduate education; however, some respondents felt that its goals should be articulated more clearly by nursing associations.

Chapter 7

Summary, Conclusions, and Recommendations

In this final chapter the research problem, procedures, and results of the study are summarized, Conclusions are stated, recommendations are made, and some topics for further research are suggested.

Summary

The nurse educator's role has become more varied and complex over the past decade. As a result, nurse educators are increasingly concerned with their professional development as part of the growing need for accountability in nursing education. However, the literature on this topic indicates that very little attention has been paid to the topic of professional development for nurse educators in diploma nursing schools, even though more than 80% of all nursing graduates in Canada come through such programs.

Research Problem

This study sought to address the following two research questions:

1. What are the perceived professional development needs of nurse educators in Alberta's diploma nursing schools relative to the seven specified knowledge and skill areas of the school of nursing, adult learner, classroom instruction, clinical and theoretical evaluation, teaching strategies, the school's curriculum, and interpersonal interactions?
2. To what extent are perceptions of the current and desired knowledge and skill levels related to variables descriptive of

diploma nurse educators?

The focus of the study was developed from the conceptual framework on needs assessment and a general review of the research literature on the topic.

Methodology

A questionnaire was developed to collect data relevant to the two research questions outlined previously. The general design of the questionnaire was based on a needs assessment conceptual model developed for the study. After pilot-testing the instrument, the researcher made modifications and finally developed a 12-page questionnaire consisting of 3 sections, 86 items, and 3 open-ended questions.

The first section of the instrument was designed to obtain information about respondents' personal and professional characteristics. The second section gathered information about the respondents' perceptions regarding their current and desired knowledge and skill levels in seven areas, namely, the school of nursing, the adult learner, classroom instruction, evaluation of clinical practice and classroom theory, the school's curriculum, teaching strategies, and interpersonal interactions. The last section consisted of three open-ended questions and was designed to give respondents an opportunity to expand, explain, or identify the areas of their responsibilities in which they perceived a particular need for professional development. Respondents were asked what plans they had for meeting the identified need(s) and what influence, if any, the higher educational requirements for beginning graduates by the year 2000 is having on their desire to pursue professional development activities.

The questionnaire, along with covering letters and stamped, addressed return envelopes, were distributed to respondents. The covering letters explained the purpose of the study, assured participants' confidentiality, and requested that they complete the instrument and return it in the stamped envelope.

Sample

The sample for the study consisted of all full-time, part-time, and casual employees from 9 of the 11 college- and hospital-based diploma schools of nursing in Alberta. One hundred and eighty-nine questionnaires were distributed, and 169 were received, for a return rate of 89%.

Most of the respondents (68.10%) were between 31 and 45 years of age. More than 42% of respondents had between four and nine years of total teaching experience in nursing. Only a few of the respondents (4.2%) had less than one year of teaching experience in nursing.

The majority of the respondents in the study had baccalaureate preparation. A few had Master's degrees or other qualifications. Those teaching in colleges tended to have higher educational preparation than did nurse educators in hospital-based programs. The majority of the nurse educators worked in both classroom and clinical settings.

Data Analysis

The data were analysed by computer using the SPSSX program. Frequency and percentage distributions based on the demographic data were used to develop a profile of the diploma nurse educators. Ranking of means for both the current and desired knowledge and skill performance

levels was used to determine the extent to which, and the areas in which, respondents perceived a need for professional development; t-tests were used to determine statistically significant differences among categories of respondents concerning the degree of perceived professional development need on specific knowledge/skill items. The open-ended responses were subjected to content analysis.

Major Findings

A summary of the characteristics of diploma nurse educators is outlined, followed by a summary of the major findings that emerged from the study organized according to the problem statement.

Profile of Nurse Educator

The majority of diploma nurse educators in Alberta are between 31 and 45 years of age. Nearly 90% of these nurse educators have a baccalaureate nursing degree as their highest level of education. The college-based nurse educators tended to have higher educational qualifications than did their hospital-based counterparts.

Most of the nurse educators are employed on a full-time basis and have been teaching nursing for four to nine years. Nearly all of the respondents worked in both classroom and clinical settings.

Degree of Perceived Need

Overall, the respondents indicated a high to very high perceived need for professional development in all seven specified knowledge and skill areas. The level of perceived need was lowest among nurse educators with seven or more years of teaching experience in nursing and

highest among those with fewer than six years' experience. The younger, less qualified nurse educators also expressed a higher degree of perceived need for development than did their older, more qualified counterparts. Although a high to very high level of need was expressed by respondents in all seven knowledge and skill areas, knowledge and skills related to classroom instruction, teaching strategies, and interpersonal relationships were viewed as critical areas for professional development.

The EP 2000 position adopted by the local and national nursing organizations was regarded as important for the nursing profession because it seems to add legitimacy to nursing education, motivates nurses to pursue higher education, and promotes professionalism and positive changes in the nursing profession. However, some respondents voiced concerns about being pressured to obtain graduate degrees in a short time period without adequate financial assistance.

In general, diploma nurse educators were not satisfied with their current knowledge and skill performance in the seven specified knowledge and skill areas. They desired a higher level of knowledge and skill performance in all of the seven areas.

The majority of these educators were willing to return to university to pursue graduate studies but preferred to take courses that would address the technical aspects of teaching rather than research. These nurse educators also cited lack of funding as a deterrent to pursuing graduate studies or pursuing professional development activities.

The EP 2000 position was regarded as necessary for professionalism, but nurse educators felt that the goals and objectives had been poorly articulated to the members of the nursing profession.

Conclusions

Results of the study indicate that very few respondents questioned the need for the assessment of the professional development needs of Alberta's diploma nurse educators at this time. The following conclusions about the professional development needs of diploma nurse educators are based on data supplied by respondents from 9 of 11 diploma schools of nursing:

1. In general, diploma nurse educators expressed a high to very high desired level of need for improved performance in all seven knowledge and skill areas identified in the study.
2. The nurse educators' perceived need for professional development was particularly evident in relation to the improvement of knowledge and skills in classroom instruction, teaching strategies, and interpersonal relations with students and peers.
3. There was evidence that levels of need for professional development vary according to age, level of education, and total years of teaching experience in nursing. Diploma nurse educators with seven or more years of teaching experience expressed lower perceived professional development needs than did their colleagues with six or fewer years of teaching experience. Diploma nurse educators who were over age 41 and had higher qualifications as well as seven or more years of teaching experience in nursing expressed lower perceived professional development needs than did their colleagues who were younger, less qualified, and had fewer than six years of teaching experience.
4. The required higher educational qualifications for entry to the practice of nursing by the year 2000 were influencing diploma nurse

educators to pursue further graduate preparation, but, at the same time, some feel insecure in their present jobs.

5. Nurse educators perceive the lack of adequate financial assistance as a barrier to pursuing graduate education.

Implications

Although the results of this study provided some significant findings that are in agreement with information revealed in the review of the literature, it is recognized that further research is needed regarding the perceived need for professional development of nurse educators employed in diploma nursing schools in Alberta. As a result, suggestions regarding implications for practice are offered with caution.

Implications for Practice

The results of this study appear to have relevance for diploma schools nurse educators and administrators. The findings revealed a perception of a high to very high degree of need on the part of Alberta diploma nurse educators for professional development on the seven specified knowledge and skill areas examined. Consequently, diploma school administrators should be aware of the great need expressed for professional development by nurse educators and should attempt to make formal arrangements to meet the identified needs.

Since the perceived need for professional development in the seven specified knowledge and skill areas is so great, it may be advisable to institute province-wide standards which require nurses involved in nursing education to have teaching certification. This move may serve to reduce the wide perceived gaps in knowledge and skills as all nurse

educators would at least have a common knowledge base relating to the technical aspects of teaching.

The findings revealed that age, level of education, and amount of teaching experience have significant effect on perceptions concerning the degree of perceived need for professional development. For example, the data indicated that the younger, less qualified, and less experienced nurse educators consistently perceived a greater need for improvement in knowledge/skills related to the seven areas analysed that did their older, more qualified, and more experienced counterparts. Therefore, personnel who provide professional development programs for nurse educators teaching in diploma nursing schools may want to consider conducting accurate needs assessments which address variables related to age, level of education, and teaching experience prior to planning and implementing such programs.

The areas in which diploma nurse educators perceived the greatest need for professional development may be of assistance to personnel in the development of effective professional development programs. Those knowledge and skills perceived as most important related to classroom instruction, teaching strategies, and maintaining good interpersonal relationships with students and peers.

With the increased focus on accountability in nursing education, nurse educators may want to determine what roles or responsibilities they may have in assessing and attempting to meet their own professional development needs in order to improve their teaching effectiveness.

The findings also revealed that diploma nurse educators expressed a strong preference for graduate nursing programs which incorporate teaching as an area of specialization, in addition to clinical and

nursing research specializations which are now available. The implication is that university administrators should develop an awareness of prospective graduate nursing students' expressed needs and be prepared to address them appropriately.

If not already in practice, diploma nursing institutions may want to consider encouraging employees to meet identified needs by providing them with a variety of options and incentives such as paid leaves of absence, sabbaticals, or other financial assistance for appropriate educational activities. Such options and incentives should be based on need rather than on seniority as is the general practice. Nurse educators who accept assistance from their employers to meet their professional needs should make specific commitment for repayment to the institution in either time or financial reimbursements.

Implications for Research

Much remains to be learned regarding diploma nurse educators' professional development needs; further research may help to answer significant concerns and questions. Additional research should also be carried out in order to establish the extent to which the findings of this study are consistent over time and different contexts. Specific recommendations are:

1. The study relied completely on a questionnaire to collect data on nurse educators' perceptions of their professional development needs. No attempt was made to use other methods such as interviews to obtain more comprehensive information on the topic. In view of this limitation, it is highly recommended that further empirical research be conducted utilizing other data collection methods such as

interviewing.

2. This study was confined to only the nurse educators specified in the sampling procedures at the time the study was carried out in Alberta in 1988; further research should be done to identify if diploma nurse educators in other provinces have similar professional development needs.

Assessment of the perceived professional development needs of diploma nurse educators is important for improving their teaching effectiveness. These educators play a crucial role in the education of nurses; consequently, their professional competence should be of great concern to the nursing profession and the public in general. Programs for meeting the professional development needs of diploma nurse educators should be well planned and carefully implemented. The results of studies such as the one which is the subject of this report have the potential for contributing information and insight relevant for planning professional development programs and for improving teaching performance.

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Appendix A

Questionnaire

FOR OFFICE USE ONLY

DIPLOMA NURSE EDUCATORS

PROFESSIONAL DEVELOPMENT NEEDS SURVEY

SECTION I

Personal and Professional Data:

Please circle the response which represents the most accurate answer to each question.

a. Your age category: 1

1. 21 - 25
2. 26 - 30
3. 31 - 35
4. 36 - 40
5. 41 - 45
6. 46 - 50
7. 51 - 55
8. Over 55

b. Highest level of education:

1. R.N. Diploma
2. R.N. plus other (please specify) _____ 2
3. Baccalaureate Degree
4. Baccalaureate Degree plus other (please specify) ____
5. Masters Degree (please specify type) _____
6. Masters Degree plus other (please specify) _____
7. Other (please specify) _____ 3

c. Total teaching experience in nursing:

1. Less than one year
2. 1 - 3 years
3. 4 - 6 years
4. 7 - 9 years
5. 10 - 12 years
6. 13 - 15 years
7. 16 - 18 years
8. Over 19 years

d. Type of present employment: 4

1. Full-Time
2. Part-Time
3. Casual

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Section I

e. Please indicate in which of the following activities you spend the majority of your time? 5

1. Classroom instruction.
2. Clinical instruction.
3. Approximately equal classroom and clinical responsibilities.
4. Laboratory instruction only.
5. Administration.
6. Other (please specify):

_____

f. Please indicate approximate number of full time faculty in the school: 6

1. Under 10
2. 10 - 19
3. 20 - 29
4. 30 - 39
5. 40 - 49
6. Over 50

g. Do you have any nursing responsibilities in nursing service, other than your teaching responsibilities? 7

Yes _____ No _____ If yes, please specify _____

h. Program: College _____ Hospital: _____ 8

SECTION II

Knowledge/Skill Inventory Items:

This section addresses your current and desired knowledge/skill level. For each item, please respond in two (2) ways:

A. Circle the number which represents your current knowledge/skill level; and,

B. Circle the number which represents your desired knowledge/skill level.

The numbers of the scale correspond to the following ratings:

1	2	3	4	5
None or Very Low	Low	Medium	High	Very High

Example: Knowledge/Skill - Learning to be creative in teaching:

Current Level	Desired Level
(1) 2 3 4 5	1 2 3 4 (5)

The responses indicate that the respondent's current knowledge/skill level is very low or non-existent in "Learning to be creative in teaching", but the respondent would like to possess a very high knowledge/skill level in this area.

Section II

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1 None or Very Low 2 Low 3 Medium 4 High 5 Very High

AREA	KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	
A. The School of Nursing	1. Knowledge of the philosophy of the School of Nursing.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2. Knowledge of conditions of employment.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3. Knowledge of the functions of administrative personnel.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4. Knowledge of the nurse educator's role.	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5. Knowledge of your expected involvement in committees.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6. Knowledge of the effects of social change in nursing education.	1 2 3 4 5	1 2 3 4 5	16, 17, 18
	7. Knowledge of the effect of political and economic factors in nursing education.	1 2 3 4 5	1 2 3 4 5	19, 20, 21
	8. Knowledge about available community services and human resources to your school.	1 2 3 4 5	1 2 3 4 5	22, 23, 24
	9. Knowledge of career opportunities available to graduates of your school.	1 2 3 4 5	1 2 3 4 5	25, 26, 27
	10. Knowledge about future plans for the School of Nursing	1 2 3 4 5	1 2 3 4 5	28, 29, 30
	11. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	12. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

Section II

1 None or Very Low | 2 Low | 3 Medium | 4 High | 5 Very High

AREA	KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	FOR OFFICE USE ONLY
B. The Adult Learner	1. Knowledge of the life-cycle of adults.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2. Knowledge of the nature of adult learning.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3. Knowledge of adult self-concept.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4. Knowledge of the theories of teaching.	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5. Knowledge of adult developmental tasks.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6. Knowledge of the adult social roles and responsibilities.	1 2 3 4 5	1 2 3 4 5	16, 17, 18
	7. Knowledge of the adult learner characteristics.	1 2 3 4 5	1 2 3 4 5	19, 20, 21
	8. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	9. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

Section II

1	2	3	4	5
None or Very Low	Low	Medium	High	Very High

AREA		KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	FOR OFFICE USE ONLY
C. Classroom Instruction	1.	Creating a favorable learning environment.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2.	Knowledge of a variety of instructional methods.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3.	Using a variety of instructional materials.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4.	Selecting appropriate instructional materials.	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5.	Managing classroom activities.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6.	Using audio-visual equipment.	1 2 3 4 5	1 2 3 4 5	16, 17, 18
	7.	Planning daily and long-term learning activities.	1 2 3 4 5	1 2 3 4 5	19, 20, 21
	8.	Preparing independent study materials.	1 2 3 4 5	1 2 3 4 5	22, 23, 24
	9.	Developing appropriate strategies to motivate adult learners.	1 2 3 4 5	1 2 3 4 5	25, 26, 27
	10.	Promoting self-directed learning.	1 2 3 4 5	1 2 3 4 5	28, 29, 30
	11.	Helping students develop critical thinking abilities.	1 2 3 4 5	1 2 3 4 5	31, 32, 33
	12.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	13.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

Section II

1	2	3	4	5
None or Very Low	Low	Medium	High	Very High

AREA		KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	FOR OFFICE USE ONLY
D1. Evaluation:	1.	Writing pertinent anecdotal notes.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
A. Clinical Practice	2.	Maintaining students' skills checklists.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3.	Recognizing students' clinical learning needs.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4.	Providing appropriate clinical learning experiences.	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5.	Writing clinical evaluation reports.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	7.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
D2. B. Classroom Theory	1.	Evaluating return demonstration.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2.	Conducting oral quizzes.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3.	Grading essay assignments.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4.	Assessing students' nursing care seminar presentations.	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5.	Constructing examination test items.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	7.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

Section II

1	2	3	4	5
None or Very Low	Low	Medium	High	Very High

AREA	KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	FOR OFFICE USE ONLY
E. School's Curriculum	1. Writing instructional objectives.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2. Evaluating clarity of instructional objectives.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3. Planning and developing curriculum.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4. Implementing the curriculum	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5. Evaluating the curriculum.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6. Revising the curriculum.	1 2 3 4 5	1 2 3 4 5	16, 17, 18
	7. Explaining the relevance of the curriculum to students.	1 2 3 4 5	1 2 3 4 5	19, 20, 21
	8. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	9. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

Section II

1 None or Very Low | 2 Low | 3 Medium | 4 High | 5 Very High

AREA	KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	FOR OFFICE USE ONLY
F. Teaching Strategies	1. Brain-storming	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2. Buzz group	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3. Computer assisted learning	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4. Case studies	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5. Debate	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6. Demonstration	1 2 3 4 5	1 2 3 4 5	16, 17, 18
	7. Educational games	1 2 3 4 5	1 2 3 4 5	19, 20, 21
	8. Field trips	1 2 3 4 5	1 2 3 4 5	22, 23, 24
	9. Guided practice	1 2 3 4 5	1 2 3 4 5	25, 26, 27
	10. Group discussion	1 2 3 4 5	1 2 3 4 5	28, 29, 30
	11. Lecture	1 2 3 4 5	1 2 3 4 5	31, 32, 33
	12. Nursing care conferences	1 2 3 4 5	1 2 3 4 5	34, 35, 36
	13. Panel presentations	1 2 3 4 5	1 2 3 4 5	37, 38, 39
	14. Programmed learning	1 2 3 4 5	1 2 3 4 5	40, 41, 42
	15. Questioning	1 2 3 4 5	1 2 3 4 5	43, 44, 45
	16. Role-playing	1 2 3 4 5	1 2 3 4 5	46, 47, 48
	17. Seminars	1 2 3 4 5	1 2 3 4 5	49, 50, 51
	18. Simulation techniques	1 2 3 4 5	1 2 3 4 5	52, 53, 54
	19. Team teaching	1 2 3 4 5	1 2 3 4 5	55, 56, 57
	20. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	21. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

Section II

1	2	3	4	5
None or Very Low	Low	Medium	High	Very High

AREA		KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	FOR OFFICE USE ONLY
G.1. Interpersonal A. Student/ Teacher Interaction	1.	Assisting students to meet their learning goals.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2.	Helping students become independent learners.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3.	Understanding the effects of stress on students performance.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4.	Responding constructively to activities initiated by students.	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5.	Developing sensitivity to students' social and emotional needs.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6.	Learning how to involve students in learning activities.	1 2 3 4 5	1 2 3 4 5	16, 17, 18
	7.	Becoming familiar with the characteristics of students.	1 2 3 4 5	1 2 3 4 5	19, 20, 21
	8.	Learning to consider students' cultural differences.	1 2 3 4 5	1 2 3 4 5	22, 23, 24
	9.	Giving students constructive feedback.	1 2 3 4 5	1 2 3 4 5	25, 26, 27
	10.	Developing effective interpersonal relationships with students.	1 2 3 4 5	1 2 3 4 5	28, 29, 30
	11.	Using mentoring techniques.	1 2 3 4 5	1 2 3 4 5	31, 32, 33
	12.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	13.	Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

FOR OFFICE USE ONLY

Section II

1 None or Very Low 2 Low 3 Medium 4 High 5 Very High

AREA	KNOWLEDGE/SKILL	A. CURRENT LEVEL	B. DESIRED LEVEL	
G.2. Interpersonal B. Personal/ Professional Development	1. Developing effective interpersonal relationships with peers and administrators.	1 2 3 4 5	1 2 3 4 5	1, 2, 3
	2. Fulfilling responsibilities towards peers.	1 2 3 4 5	1 2 3 4 5	4, 5, 6
	3. Role-modeling personal and professional behaviors.	1 2 3 4 5	1 2 3 4 5	7, 8, 9
	4. Implementing the different components of the nurse educator's role.	1 2 3 4 5	1 2 3 4 5	10, 11, 12
	5. Using self-evaluation to improve teaching effectiveness.	1 2 3 4 5	1 2 3 4 5	13, 14, 15
	6. Understanding faculty evaluation.	1 2 3 4 5	1 2 3 4 5	16, 17, 18
	7. Using feedback from peers, students and supervisor to improve general instructional performance.	1 2 3 4 5	1 2 3 4 5	19, 20, 21
	8. Conducting nursing research.	1 2 3 4 5	1 2 3 4 5	22, 23, 24
	9. Keeping abreast of current trends and issues in nursing research.	1 2 3 4 5	1 2 3 4 5	25, 26, 27
	10. Maintaining nursing knowledge at a current level.	1 2 3 4 5	1 2 3 4 5	28, 29, 30
	11. Learning to be innovative and creative in teaching.	1 2 3 4 5	1 2 3 4 5	31, 32, 33
	12. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	
	13. Other (please specify) _____	1 2 3 4 5	1 2 3 4 5	

OPEN-ENDED QUESTIONS

SECTION III

1. In what areas of your responsibilities do you feel a particular desire for further professional development?

2. What are your future plans for professional development?

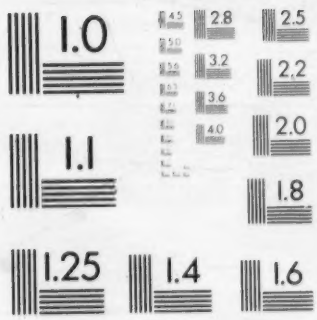
3. In what way(s), if any, is EP 2000 influencing your professional development?

Thank you for your cooperation in completing this Questionnaire.

Appendix B

Correspondence

3 OF/DE 3



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University of Alberta
Edmonton
Canada T6G 2G5

Department of Industrial and Vocational Education
Faculty of Education
633 Education Building South, Telephone (403) 432-3678

May 20th, 1988

Anna Laberge
Director
Alberta Hospital
School of Nursing
P. O. Box 307
EDMONTON, Alberta
T5L 5J6

Dear Madam:

To review our recent telephone conversation, I wish to pilot the instrument "Diploma Nurse Educators Professional Development Needs Survey" at your School of Nursing.

Approximately five nurse educators will be asked to complete the questionaire consisting of three parts:

Section I: Personal/Professional data;
Section II: Knowledge/skill inventory items; and
Section III: Open-ended questions.

It would be helpful if the participants would also provide feedback on the organization, interpretation, clarity and amount of time required to complete the questionaire. This information and feedback will help me refine the instrument. A draft copy of the instrument is enclosed for your information.

Thank you for your assistance. I will be in touch to arrange a date for this pilot.

Sincerely,

Yvonne Scarlett
Telephone: 481 - 4673

Encl.

University of Alberta
Edmonton
Canada T6G 2G5

Department of Industrial and Vocational Education
Faculty of Education
633 Education Building South, Telephone (403) 432-3678

June 8, 1988

Anna Laberge
Director
Alberta Hospital
School of Nursing
P.O. Box 307
Edmonton, Alberta
T5Z 5J6

Dear Madam:

I was pleased to have the opportunity to meet with you and the five members of your faculty who volunteered for the pilot study. The input which I received from your group was invaluable.

I would like to take this opportunity to thank you once again for your assistance. A copy of the completed thesis will be donated to your library as a small token of my appreciation for your assistance.

Thanks again.

Sincerely,

Yvonne Scarlett

Student Name: Yvonne V. Scarlett

Thesis Title: Perceived Professional Development Needs of Diploma Nurse Educators in Alberta

Summary of proposed research

The majority of practising nurses in Canada are prepared in diploma nursing programs. Yet, there is little documentation in the literature addressing the professional development needs of nurse educators in diploma schools.

The findings of my research should provide a profile of Alberta's diploma nurse educators, identify their professional development needs, and furnish a data base for further research studies.

Ethical concerns and safeguards

All respondents in this study will be assured anonymity and all responses will be treated confidentially. Names of respondents are not required on the questionnaires and names of schools of nursing will not be identified - except whether the program is hospital based versus college based. All questionnaires will be destroyed once all data has been extracted. There is no risk associated with this study to the participants. Prior to completing the questionnaire participants will be informed about the nature and objectives of the research either verbally or by a written letter. They will be given the opportunity not to participate if that is their wish. Informed consent will be considered to be given when participants voluntarily complete the questionnaire after being informed about its nature and objectives. Where institution policy require written consents these will be provided and obtained before completion of the questionnaire. One concern is the fact that the researcher is an employee of one of these hospitals. However, since replies are anonymous and voluntary, ethical concerns are addressed.

University of Alberta
Edmonton
Canada T6G 2G5

Department of Industrial and Vocational Education
Faculty of Education
633 Education Building South. Telephone (403) 432-3678

May 25, 1988

Dear Nurse Educator:

I am a graduate student at the University of Alberta and am in the process of completing my masters thesis in Adult and Higher Education. The findings of my research should provide a profile of Alberta's diploma nurse educators, identify their professional development needs, and furnish a data base for further research studies.

To achieve this a questionaire has been designed to gather the opinions of nurse educators in diploma nursing schools in Alberta. I would very much appreciate your time and effort in completing the questionaire and returning it in the stamped, self-addressed envelope which you will find enclosed. The questionaire should take 15-20 minutes of your time to complete.

All information will be treated confidentially and participation in the study is strictly voluntary.

I am looking forward to receiving your imput. Thank you for your assistance.

Sincerely,

Yvonne Scarlett
Telephone: 481 - 4673

Encl.

University of Alberta
Edmonton
Canada T6G 2G5

Department of Industrial and Vocational Education
Faculty of Education
633 Education Building South, Telephone (403) 492-3678

June 8, 1988

Dear _____:

I am a graduate student at the University of Alberta and am in the process of completing my master thesis in Adult and Higher Education. The findings of my research should provide a profile of Alberta's diploma nurse educators, identify their professional development needs, and furnish a data base for further research studies.

To achieve this, a questionnaire has been developed to gather the opinions of nurse educators in diploma nursing schools in Alberta. I would appreciate if you would permit me to circulate the questionnaire on Professional Development Needs to nurse educators in your school. I have enclosed a copy of the questionnaire along with a summary of the proposed research, ethical concerns and safeguards.

If the proposed research and ethical safeguards are satisfactory to you and/or your research committee, I would appreciate your assistance in the following ways:

1. Please send me a list of your faculty members who are teaching on a casual, part-time and full-time basis.
2. I would then like to send an introductory letter and questionnaire to the above nurse educators utilizing their work address.

Thank you for your cooperation.

Sincerely,

Yvonne V. Scarlett

University of Alberta
Edmonton
Canada T6G 2G5

Department of Industrial and Vocational Education
Faculty of Education
633 Education Building South, Telephone (403) 492-3678

June 16, 1988

Dear _____:

I am a graduate student at the University of Alberta and am in the process of completing my master thesis in Adult and Higher Education. The findings of my research should provide a profile of Alberta's diploma nurse educators, identify their professional development needs, and furnish a data base for further research studies.

To achieve this, a questionnaire on Professional Development Need has been developed to gather the opinions of nurse educators in diploma nursing schools in Alberta. I would very much appreciate if you would distribute the enclosed questionnaires, covering letters and self-addressed envelopes to members of your faculty who are employed on a casual, part-time and full-time basis. The questionnaire should take 15-20 minutes to complete and must be returned in the stamped self-addressed envelope.

All information will be treated confidentially and participation in the study is strictly voluntary.

I am looking forward to receiving your input. Thank you for your assistance.

Sincerely,

Yvonne Scarlett
Telephone: 481-4673

encl.

Appendix C

Tables

Current and Desired Performance Levels

Table C.1

Mean Scores Ranked According to Current Level of Performance

Area	Knowledge/skill	Current level Mean score	Rank
TS	Case studies	4.73	1
TS	Computer-assisted learning	4.73	1
SON	Knowledge of the nurse educator's role	4.24	3
SON	Knowledge about available community services and human resources to your school	4.23	4
PPD	Role modeling personal and professional behaviors	4.21	5
PPD	Using feedback from peers, students, and supervisor to improve general instructional performance	4.17	6
PPD	Understanding faculty evaluation	4.16	7
SON	Knowledge of conditions of employment	4.15	8
TS	Questioning	4.14	9
PPD	Learning to be innovative and creative in teaching	4.10	10
SON	Knowledge of the philosophy of the School of Nursing	4.04	11.5
STI	Becoming familiar with the characteristics of students	4.04	11.5
ECP	Providing appropriate clinical learning experiences	4.01	13
PPD	Keeping abreast of current trends and issues in nursing research	4.00	14
STI	Giving students constructive feedback	3.98	15.5
TS	Group discussion	3.98	15.5
ECP	Recognizing students' clinical learning experiences	3.97	17

(table continues)

Table C.1 (continued)

Area	Knowledge/skill	Current level Mean score	Rank
PPD	Fulfilling responsibilities towards peers	3.95	18
TS	Programmed learning	3.94	19.5
AL	Knowledge of the adult social roles and responsibilities	3.94	19.5
STI	Using mentoring techniques	3.93	21
PPD	Using self-evaluation to improve teaching effectiveness	3.91	22
STI	Developing sensitivity to students' social and emotional needs	3.90	23
SON	Knowledge of career opportunities available to graduates of your school	3.89	24
AL	Knowledge of the life-cycle of adults	3.86	25
STI	Developing effective interpersonal relationships with students	3.85	26.5
STI	Learning to consider students' cultural differences	3.85	26.5
PPD	Maintaining nursing knowledge at a current level	3.84	28
AL	Knowledge of adult developmental tasks	3.83	29
CI	Knowledge of a variety of instructional methods	3.82	30.5
ECT	Evaluating return demonstration	3.82	30.5
CI	Managing classroom activities	3.81	32
CI	Creating a favorable learning environment	3.80	33
AL	Knowledge of the adult learner characteristics	3.79	34.5
TS	Panel presentations	3.79	34.5
STI	Learning how to involve students in learning activities	3.78	36

(table continues)

Table C.1 (continued)

Area	Knowledge/skill	Current level Mean score	Rank
PPD	Conducting nursing research	3.77	37.5
ECP	Writing clinical evaluation reports	3.77	37.5
CI	Using audio-visual equipment	3.74	39.5
SC	Implementing the curriculum	3.74	39.5
CI	Planning daily and long-term learning activities	3.73	41
TS	Team teaching	3.68	42
TS	Field trips	3.66	45.5
AL	Knowledge of the nature of adult learning	3.66	45.5
SON	Knowledge of the functions of administrative personnel	3.66	45.5
AL	Knowledge of adult self-concept	3.66	45.5
TS	Role playing	3.65	47
CI	Selecting appropriate instructional materials	3.64	48
CI	Using a variety of instructional materials	3.63	49.5
SC	Evaluating clarity of instructional objectives	3.62	49.5
ECP	Maintaining students' skills checklists	3.61	51
ECP	Writing pertinent anecdotal notes	3.60	52
ECT	Assessing students' nursing care seminar presentations	3.59	53.5
SON	Knowledge of the effect of political and economic factors in nursing education	3.59	53.5
TS	Brainstorming	3.58	55.5
TS	Buzz group	3.58	53.5

(table continues)

Table C.1 (continued)

Area	Knowledge/skill	Current level Mean score	Rank
SC	Explaining the relevance of the curriculum to students	3.57	57
SON	Knowledge about available community services and human resources to your school	3.56	58
ECT	Grading essay assignments	3.54	59
SON	Knowledge of the effect of political and economic factors in nursing education	3.52	60
PPD	Developing effective interpersonal relationships with peers and administrators	3.50	61
SC	Writing instructional objectives	3.49	62.5
TS	Debate	3.49	62.5
CI	Promoting self-directed learning	3.45	64
CI	Helping students develop critical thinking abilities	3.43	66.5
STI	Helping students become independent learners	3.43	66.5
ECT	Conducting oral quizzes	3.43	66.5
SC	Evaluating the curriculum	3.41	68
AL	Knowledge of the theories of teaching	3.38	69
CI	Developing appropriate strategies to motivate adult learners	3.35	70
SON	Knowledge about future plans for the School of Nursing	3.34	71
STI	Assisting students to meet their learning goals	3.32	72
ECT	Constructing examination test items	3.29	73
SC	Revising the curriculum	3.28	74

(table continues)

Table C.1 (continued)

Area	Knowledge/skill	Current level Mean score	Rank
PPD	Implementing the different components of the nurse educator's role	3.27	75
CI	Preparing independent study materials	3.17	76
STI	Understanding the effects of stress on students' performance	3.16	77
STI	Responding constructively to activities initiated by students	3.12	78
SC	Planning and developing curriculum	3.10	79
TS	Demonstration	3.00	80
TS	Seminars	2.89	81
TS	Nursing care conferences	2.83	82
TS	Simulation techniques	2.82	83
TS	Lecture	2.81	84
TS	Guided practice	2.79	85
TS	Educational games	2.46	86

Areas:

SC: The School of Nursing
AL: The Adult Learner
CI: Classroom Instruction
ECP: Evaluation: Clinical Practice
ECT: Evaluation: Classroom Theory
SC: School's Curriculum
TS: Teaching Strategies
STI: Interpersonal: Student-Teacher Interaction
PPD: Interpersonal: Personal/Professional Development

Table C.2

Mean Scores Ranked According to Desired Level of Performance

Area	Knowledge/skill	Desired level Mean score	Rank
CI	Helping students develop critical thinking abilities	4.96	1
CI	Knowledge of a variety of instructional methods	4.91	2
CI	Promoting self-directed learning	4.90	3
SON	Knowledge of the nurse educator's role	4.89	4.5
CI	Developing appropriate strategies to motivate adult learners	4.89	4.5
CI	Creating a favourable learning environment	4.88	7.5
CI	Using a variety of instructional methods	4.88	7.5
PPD	Fulfilling responsibilities towards peers	4.88	7.5
STI	Learning how to involve students in learning activities	4.86	10.5
STI	Developing sensitivity to students' social and emotional needs	4.86	10.5
STI	Becoming familiar with the characteristics of students	4.86	10.5
STI	Developing effective interpersonal relationships with students	4.85	13.5
PPD	Role modeling personal and professional behaviors	4.85	13.5
CI	Selecting appropriate instructional materials	4.85	13.5
ECP	Providing appropriate clinical learning experiences	4.83	15.5
ECP	Writing clinical evaluation reports	4.83	15.5

(table continues)

Table C.2 (continued)

Area	Knowledge/skill	Desired level Mean score	Rank
ECP	Recognizing students' learning needs	4.82	19.5
SON	Knowledge about future plans for the School of Nursing	4.82	19.5
STI	Learning to consider students' cultural differences	4.82	19.5
TS	Programmed learning	4.82	19.5
CI	Managing classroom activities	4.81	22
CI	Planning daily and long-term activities	4.81	22
AL	Knowledge of the nature of adult learning	4.80	25.5
AL	Knowledge of the theories of teaching	4.80	25.5
PPD	Keeping abreast of current trends and issues in nursing research	4.80	25.5
STI	Giving students constructive feedback	4.80	25.5
PPD	Using feedback from peers, students, and supervisors to improve general instructional performance	4.79	32.5
SON	Knowledge of the effects of social change in nursing education	4.79	32.5
SON	Knowledge of the effects of political and economic factors in nursing education	4.79	32.5
AL	Knowledge of the adult learner characteristics	4.79	32.5
PPD	Learning to be innovative and creative in teaching	4.79	32.5
PPD	Conducting nursing research	4.79	32.5
AL	Knowledge of adult self-concept	4.79	32.5
TS	Questioning	4.78	34.5
TS	Team teaching	4.78	34.5

(table continues)

Table C.2 (continued)

Area	Knowledge/skill	Desired level Mean score	Rank
STI	Using mentoring techniques	4.77	36
SC	Evaluating clarity of instructional objectives	4.77	36
PPD	Using self-evaluation to improve teaching effectiveness	4.76	38.5
PPD	Implementing the different components of the nurse educator's role	4.76	38.5
SC	Implementing the curriculum	4.76	38.5
SC	Evaluating the curriculum	4.75	41.5
ECT	Constructing examination test items	4.75	41.5
PPD	Understanding faculty evaluation	4.74	45.5
CI	Using audio-visual equipment	4.74	45.5
PPD	Developing effective interpersonal relationships with peers and administrators	4.74	45.5
SC	Revising the curriculum	4.74	45.5
SC	Explaining the relevance of the curriculum to students	4.73	47
AL	Knowledge of adult developmental tasks	4.72	48.5
PPD	Maintaining nursing knowledge at a current level	4.72	48.5
CI	Preparing independent study materials	4.71	50
SC	Planning and developing curriculum	4.70	51
SON	Knowledge of conditions of employment	4.69	53.5
SON	Knowledge about available community services and human resources to your school	4.69	53.5
SC	Writing instructional objectives	4.69	53.5

(table continues)

Table C.2 (continued)

Area	Knowledge/skill	Desired level Mean score	Rank
TS	Role playing	4.66	57.5
TS	Educational games	4.66	57.5
AL	Knowledge of the life cycle of adults	4.66	57.5
TS	Group discussion	4.66	57.5
TS	Panel presentations	4.64	59
SON	Knowledge of your expected involvement in committees	4.63	60
AL	Knowledge of the adult social roles and responsibilities	4.62	61.5
SON	Knowledge of career opportunities available to graduates of your school	4.62	61.5
TS	Field trips	4.60	63.5
ECT	Grading essay assignments	4.60	63.5
SON	Knowledge of the philosophy of the School of Nursing	4.59	65
ECT	Assessing students' nursing care seminar presentations	4.58	66.5
STI	Understanding the effects of stress on students' performance	4.58	66.5
ECP	Writing pertinent anecdotal notes	4.57	70.5
TS	Case studies	4.57	70.5
TS	Buzz group	4.57	70.5
TS	Debate	4.57	70.5
ECT	Evaluating return demonstration	4.56	72
STI	Helping students become independent learners	4.54	73

(table continues)

Table C.2 (continued)

Area	Knowledge/skill	Desired level Mean score	Rank
ECT	Conducting oral quizzes	4.53	74
STI	Assisting students to meet their learning goals	4.49	75.5
SON	Knowledge of the functions of administrative personnel	4.49	75.5
TS	Lecture	4.39	77
TS	Demonstration	4.33	78.5
TS	Simulation techniques	4.33	78.5
TS	Seminars	4.31	80
STI	Responding constructively to activities initiated by students	4.29	81
TS	Guided practice	4.17	82
ECP	Maintaining students' skills checklists	4.16	83
TS	Nursing care conferences	3.98	84
TS	Computer-assisted learning	3.49	86
TS	Brainstorming	3.49	86

Areas:

SC: The school of nursing
AL: The adult learner
CI: Classroom instruction
ECP: Evaluation: Clinical practice
ECT: Evaluation: Classroom theory
SC: School's curriculum
TS: Teaching strategies
STI: Interpersonal: Student-teacher interaction
PPD: Interpersonal: Personal/professional development

Table C.3

Knowledge/Skill Items Ranked According to Discrepancy Scores

Area	Knowledge/skill	Discrepancy score	Rank
TS	Educational games	2.20	1
SC	Planning and developing curriculum	1.60	2
TS	Lecture	1.58	3
CI	Developing appropriate strategies to motivate adult learners	1.54	4.5
CI	Preparing independent study materials	1.54	4.5
CI	Helping students develop critical thinking abilities	1.53	6
TS	Simulation techniques	1.51	7
PPD	Implementing the different components of the nurse educator's role	1.49	8
SON	Knowledge about future plans for the school of nursing	1.48	9
SC	Revising the curriculum	1.46	10.5
ECT	Constructing examination test items	1.46	10.5
CI	Promoting self-directed learning	1.45	12
TS	Seminars	1.42	13.5
STI	Understanding the effects of stress on students' performance	1.42	13.5
AL	Knowledge of the theories of teaching	1.42	13.5
TS	Guided practice	1.38	16
SC	Evaluating the curriculum	1.34	17
TS	Demonstration	1.33	18

(table continues)

Table C.3 (continued)

Area	Knowledge/skill	Discrepancy score	Rank
SON	Knowledge of the effects of political and economic factors in nursing education	1.27	19
CI	Using a variety of instructional materials	1.25	20
PPD	Developing effective interpersonal relationships with peers and administrators	1.24	21
SC	Selecting appropriate instructional materials	1.21	22
SC	Writing instructional objectives	1.20	23.5
SON	Knowledge of the effects of social change in nursing education	1.20	23.5
STI	Assisting students to meet their learning needs	1.17	25.5
STI	Responding constructively to activities initiated by students	1.17	25.5
SC	Explaining the relevance of the curriculum to students	1.16	27
SC	Evaluating clarity of instructional objectives	1.15	28.5
TS	Nursing care conferences	1.15	28.5
AL	Knowledge of the nature of adult learning	1.14	30
SON	Knowledge about available community services and human resources to your school	1.13	31
AL	Knowledge of adult self-concept	1.12	32
STI	Helping students become independent learners	1.10	34.5
TS	Team teaching	1.10	34.5
ECT	Conducting oral quizzes	1.10	34.5
CI	Knowledge of a variety of instructional materials	1.09	36
CI	Creating a favorable learning environment	1.08	37.5

(table continues)

Table C.3 (continued)

Area	Knowledge/skill	Discrepancy score	Rank
CI	Planning daily and long-term learning activities	1.08	37.5
TS	Debate	1.08	37.5
STI	Learning how to involve students in learning activities	1.08	37.5
ECT	Grading essay assignments	1.06	42
ECP	Writing clinical evaluation reports	1.06	42
SC	Implementing the curriculum	1.02	43.5
PPD	Conducting nursing research	1.02	43.5
TS	Role playing	1.01	45
AL	Knowledge of the adult learner characteristics	1.00	47.5
CI	Managing classroom activities	1.00	47.5
CI	Using audio-visual equipment	1.00	47.5
STI	Developing effective interpersonal relationships with students	1.00	47.5
TS	Buzz group	.99	50
ECT	Assessing students' nursing care seminar presentations	.98	51
STI	Learning to consider students' cultural differences	.97	52.5
ECP	Writing pertinent anecdotal notes	.97	52.5
STI	Developing sensitivity to students' social and emotional needs	.96	54
TS	Field trips	.94	55
PPD	Fulfilling responsibilities towards peers	.93	56
AL	Knowledge of adult developmental tasks	.89	57

(table continues)

Table C.3 (continued)

Area	Knowledge/skill	Discrepancy score	Rank
TS	Programmed learning	.88	58.5
PPD	Maintaining nursing knowledge at a current level	.88	58.5
PPD	Using self-evaluation to improve teaching effectiveness	.85	62
TS	Panel presentations	.85	62
ECP	Recognizing students' clinical learning needs	.85	62
TS	Case studies	.84	63.5
STI	Using mentoring techniques	.84	63.5
SON	Knowledge of the functions of administrative personnel	.83	65
ECT	Providing appropriate clinical learning experiences	.82	67.5
STI	Becoming familiar with the characteristics of students	.82	67.5
STI	Giving students constructive feedback	.82	67.5
AL	Knowledge of the life-cycle of adults	.80	70
PPD	Keeping abreast of current trends and issues in nursing research	.80	70
ECT	Evaluating return demonstration	.74	71
SON	Knowledge of career opportunities available to graduates of your school	.73	72
PPD	Learning to be innovative and creative in teaching	.69	73
TS	Group discussion	.68	74.5
AL	Knowledge of the adult social roles and responsibilities	.68	74.5
SON	Knowledge of the nurse educator's role	.65	76

(table continues)

Table C.3 (continued)

Area	Knowledge/skill	Discrepancy score	Rank
TS	Questioning	.64	77.5
PPD	Role modeling personal and professional behaviors	.64	77.5
PPD	Using feedback from peers, students, and supervisor to improve general instructional performance	.62	79
PPD	Understanding faculty evaluation	.58	80
SON	Knowledge of the philosophy of the school of nursing	.55	81.5
ECP	Maintaining students' skills checklists	.55	81.5
SON	Knowledge of conditions of employment	.54	83
SON	Knowledge of your expected involvement in committees	.40	84
TS	Computer-assisted learning	-.77	85
TS	Brainstorming	-.91	86

Areas:

SC: The school of nursing
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